

# Putnam Variable Trust

## **Putnam VT George Putnam Balanced Fund**

**Annual report**

**12 | 31 | 23**

# Message from the Trustees

February 8, 2024

Dear Shareholder:

With the new year comes new beginnings. We are pleased to report that on January 1, 2024, Franklin Resources, Inc., a leading global asset management firm operating as Franklin Templeton, acquired Putnam Investments.

With complementary capabilities and an established infrastructure serving over 150 countries, Franklin Templeton enhances Putnam's investment, risk management, operations, and technology platforms. Together, our firms are committed to delivering strong fund performance and more choices for our investors.

As we enter this new chapter, you can rest assured that your fund continues to be actively managed by the same experienced professionals. Your investment team is exploring new and attractive opportunities for your fund, while monitoring changing market conditions. The following pages provide an update on your fund.

Thank you for investing with Putnam.

Respectfully yours,



**Robert L. Reynolds**  
President, The Putnam Funds



**Kenneth R. Leibler**  
Chair, Board of Trustees

## Performance summary (as of 12/31/23)

### Investment objective

Balanced investment comprising a well-diversified portfolio of stocks and bonds that produce both capital growth and current income

### Net asset value December 31, 2023

Class IA: \$13.75

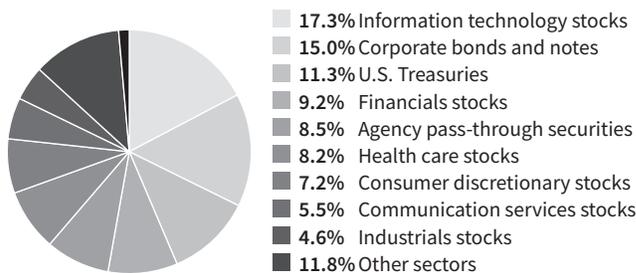
Class IB: \$13.66

### Annualized total return at net asset value (as of 12/31/23)

	Class IA shares (4/30/98)	Class IB shares (4/30/98)	George Putnam Blended Index (primary benchmark)	S&P 500 Index (secondary benchmark)	Bloomberg U.S. Aggregate Bond Index
1 year	20.26%	19.90%	17.82%	26.29%	5.53%
5 years	10.71	10.43	10.25	15.69	1.10
10 years	8.30	8.03	8.27	12.03	1.81
Life of fund	5.55	5.30	6.83	7.82	4.00

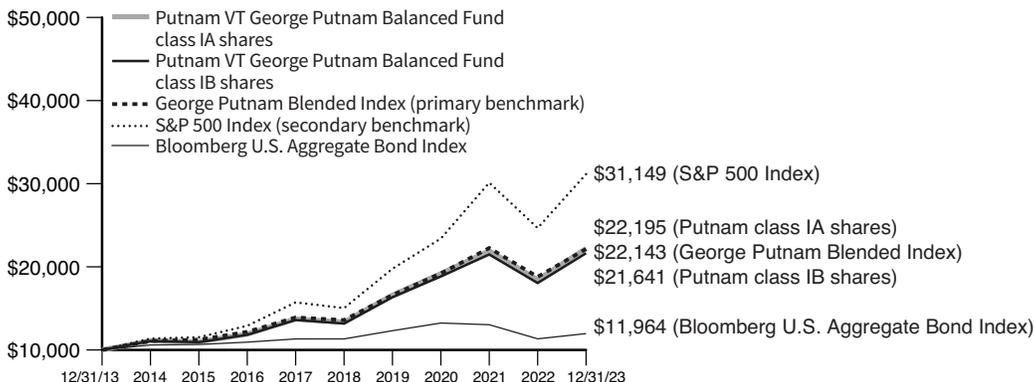
For a portion of the periods, the fund had expense limitations, without which returns would have been lower.

### Portfolio composition



Allocations are shown as a percentage of the fund's net assets. Cash and net other assets, if any, represent the market value weights of cash, derivatives, short-term securities, and other unclassified assets in the portfolio. Summary information may differ from the portfolio schedule included in the financial statements due to the inclusion of derivative securities, any interest accruals, the exclusion of as-of-trades, if any, the use of different classifications of securities for presentation purposes, and rounding. Holdings and allocations may vary over time. Due to rounding, percentages may not equal 100%.

### Cumulative total returns of a \$10,000 investment in class IA and class IB shares at net asset value — since 12/31/13



The George Putnam Blended Index is an unmanaged index administered by Putnam Management, 60% of which is the S&P 500® Index and 40% of which is the Bloomberg U.S. Aggregate Bond Index. The S&P 500® Index is an unmanaged index of common stock performance. The Bloomberg U.S. Aggregate Bond Index is an unmanaged index of U.S. investment-grade fixed income securities.

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**Data represent past performance. Past performance does not guarantee future results. More recent returns may be less or more than those shown. Investment return and principal value will fluctuate, and you may have a gain or a loss when you sell your shares. Performance information does not reflect any deduction for taxes a shareholder may owe on fund distributions or on the redemption of fund shares. All total return figures are at net asset value and exclude contract charges and expenses, which are added to the variable annuity contracts to determine total return at unit value. Had these charges and expenses been reflected, performance would have been lower. For more recent performance, contact your variable annuity provider who can provide you with performance that reflects the charges and expenses at your contract level.**

## Report from your fund's managers

### **Please describe the investing environment for the 12-month reporting period ended December 31, 2023.**

Market volatility remained elevated over the period. In January, stocks performed well as inflation declined and the U.S. Federal Reserve slowed its interest hikes. Better-than-expected corporate earnings and a strong U.S. labor market also increased demand for risk assets.

In February, optimism over China's economic reopening was short-lived, as the nation faced a housing crisis and weak consumer spending. Several U.S. regional bank failures in March also eroded investor confidence. A months-long debate surrounding the U.S. debt ceiling also cautioned investors. A bipartisan resolution was reached in May, U.S. Treasury yields moved higher. After pausing its monetary tightening in June, the Fed raised rates in July. The Fed left the federal funds rate at a 22-year high of 5.25%–5.50% through period-end. In mid-December, the Fed projected it would make three rate cuts in calendar 2024. Dovish comments by Fed policymakers resulted in a stock rally and lower U.S. Treasury yields in the final weeks of the period.

For the 12-month reporting period, U.S. stocks, as measured by the S&P 500 Index, returned 26.29%. Investment-grade [IG] bonds, as measured by the Bloomberg U.S. Aggregate Bond Index, returned 5.53%. The yield on the benchmark 10-year U.S. Treasury note began the period at 3.88%, rose to a high of 4.98% in October, and returned to 3.88% at period-end.

### **How did Putnam VT George Putnam Balanced Fund perform for the reporting period?**

The fund's class IA shares returned 20.26%, outperforming its primary benchmark, the George Putnam Blended Index, which returned 17.82%. This custom index comprises 60% of the S&P 500 Index and 40% of the Bloomberg U.S. Aggregate Bond Index. The fund underperformed its all-stock secondary benchmark, the S&P 500 Index.

### **Within the stock portfolio, what were some top contributors relative to the fund's primary benchmark for the reporting period?**

An overweight position in PulteGroup, a leading U.S. home construction group, was a top contributor. Homeowners who locked in ultra-low mortgage rates during the pandemic saw their home prices appreciate in recent years. Combined with higher interest rates, many people stayed in their homes, which created a supply deficit in the U.S. residential housing market. New home builders like PulteGroup helped fill the market's void, and its stock appreciated.

Salesforce, a cloud-based enterprise software provider, was another top performer. Historically, Salesforce's annual growth rate topped 20%, but had declined in calendar 2022. High interest rates and economic uncertainty curbed business spending on software products, which was a drag on Salesforce's earnings. In calendar 2023, Salesforce focused on reducing its spending to improve its bottom line. This began to pay off when management raised its

fourth quarter fiscal 2024 guidance, surpassing analyst expectations. Salesforce's stock gained 70% over the period, benefiting our overweight position.

### **What were some stocks that detracted from returns relative to the primary benchmark for the reporting period?**

An out-of-benchmark position in Exxon Mobil was a top detractor. Weakening oil and gas prices were a drag on the energy sector. In October 2023, Exxon announced plans to acquire Pioneer Natural Resources, which cautioned some investors, and Exxon's stock declined. We believe the merger will benefit Exxon by doubling its footprint in the Permian Basin, creating synergistic revenue streams, and meaningful upstream growth. We also value Exxon's commitment to returning capital to shareholders through dividends and buybacks. We continue to own Exxon in the stock portfolio.

An underweight position in Apple Inc. was another detractor. The technology giant's stock outperformed the S&P 500 Index for the full calendar year 2023. With \$1 trillion valuation, Apple remains overvalued, in our view. We continue to focus on investing in companies that we believe have more attractive valuations and potential for upside.

### **How did the portfolio's bond allocations perform during the reporting period?**

Our bond allocations outperformed the Bloomberg U.S. Aggregate Bond Index for the period. IG corporate credit strategies were the largest contributor to relative returns, led by positioning in the financials and technology sectors. IG corporate credit spreads, as represented by the Bloomberg U.S. Corporate Index, ended the year 31 basis points [bps] tighter at 99 bps. Exposure to commercial mortgage-backed securities [CMBS] detracted the most from returns. Negative headlines surrounding office properties, banking stress, and higher long-term interest rates contributed to a broad decline in the CMBS market in the first quarter of calendar 2023. The CMBS market stabilized thereafter but remained challenged by an uncertain economic outlook and tighter lending markets.

### **What is your outlook for bond markets?**

Healthy market technicals [supply and demand metrics] and supportive macroeconomic data have kept IG spread volatility low. The increased likelihood that the Fed will cut interest rates in calendar 2024 also has driven valuations to their year-to-date highs. While dovish central bank commentary has reduced the probability of a near-term recession, challenges in commercial real estate and regional banks have remained, in our view. Signs of consumer stress have increased with the depletion of pandemic-era savings and cuts to government stimulus programs in calendar 2023. Against this backdrop, we continue to seek out and find pockets of idiosyncratic opportunity but remain cautious on overall valuations.

### **How were derivatives used during the period?**

We used forward currency contracts to help hedge foreign exchange risk.

### As the fund begins a new fiscal year, what is your outlook?

As we move into 2024, lingering concerns about inflation, the labor market, and a potential recession could impact earnings growth, in our view. In terms of valuation, rising interest rates put a lid on price/earnings multiples in calendar 2023 as bonds became more competitive with stocks. However, we believe a recent retreat in the 10-year U.S. Treasury yield could support growth multiples among company valuations.

As active managers, we are focused on delivering consistent benchmark outperformance under varying market conditions. For the portfolio, we continue to use deep fundamental research to identify companies and their stock-specific risks. Our goal is to create a diversified portfolio that can achieve consistent capital appreciation.

*The foregoing information reflects our views, which are subject to change. They are not meant as investment advice. Please note that the holdings discussed in this report may not have been held by the fund for the entire period. Portfolio composition is subject to review in accordance with the fund's investment strategy and may vary in the future.*

### Your fund's managers



Portfolio Manager **Andrew C. Benson** has been in the investment industry since he joined Putnam in 2008.



Portfolio Manager **Kathryn B. Lakin** is Director of Equity Research. She joined Putnam in 2012 and has been in the investment industry since 2008.

Your fund's managers also manage other accounts advised by Putnam Management or an affiliate, including retail mutual fund counterparts to the funds in Putnam Variable Trust.

## Understanding your fund's expenses

As an investor in a variable annuity product that invests in a registered investment company, you pay ongoing expenses, such as management fees, distribution fees (12b-1 fees), and other expenses. Using the following information, you can estimate how these expenses affect your investment and compare them with the expenses of other funds. You may also pay one-time transaction expenses, which are not shown in this section and would result in higher total expenses. Charges and expenses at the insurance company separate account level are not reflected. For more information, see your fund's prospectus or talk to your financial representative.

### Review your fund's expenses

The two left-hand columns of the Expenses per \$1,000 table show the expenses you would have paid on a \$1,000 investment in your fund from 7/1/23 to 12/31/23. They also show how much a \$1,000 investment would be worth at the close of the period, assuming *actual returns and expenses*. To estimate the ongoing expenses you paid over the period, divide your account value by \$1,000, then multiply the result by the number in the first line for the class of shares you own.

### Compare your fund's expenses with those of other funds

The two right-hand columns of the Expenses per \$1,000 table show your fund's expenses based on a \$1,000 investment, assuming a *hypothetical 5% annualized return*. You can use this information to compare the ongoing expenses (but not transaction expenses or total costs) of investing in the fund with those of other funds. All shareholder reports of mutual funds and funds serving as variable annuity vehicles will provide this information to help you make this comparison. Please note that you cannot use this information to estimate your actual ending account balance and expenses paid during the period.

### Expense ratios

	Class IA	Class IB
Total annual operating expenses for the fiscal year ended 12/31/22*	0.67%	0.92%
Annualized expense ratio for the six-month period ended 12/31/23†	0.67%	0.92%

Fiscal year expense information in this table is taken from the most recent prospectus, is subject to change, and may differ from that shown for the annualized expense ratio and in the financial highlights of this report.

Expenses are shown as a percentage of average net assets.

\*Restated to reflect current fees.

†Expense ratios for each class are for the fund's most recent fiscal half year. As a result of this, ratios may differ from expense ratios based on one-year data in the financial highlights.

### Expenses per \$1,000

	Expenses and value for a \$1,000 investment, assuming actual returns for the 6 months ended 12/31/23		Expenses and value for a \$1,000 investment, assuming a hypothetical 5% annualized return for the 6 months ended 12/31/23	
	Class IA	Class IB	Class IA	Class IB
Expenses paid per \$1,000*†	\$3.50	\$4.80	\$3.41	\$4.69
Ending value (after expenses)	\$1,073.40	\$1,071.40	\$1,021.83	\$1,020.57

\*Expenses for each share class are calculated using the fund's annualized expense ratio for each class, which represents the ongoing expenses as a percentage of average net assets for the six months ended 12/31/23. The expense ratio may differ for each share class.

†Expenses based on actual returns are calculated by multiplying the expense ratio by the average account value for the period; then multiplying the result by the number of days in the period (184); and then dividing that result by the number of days in the year (365). Expenses based on a hypothetical 5% return are calculated by multiplying the expense ratio by the average account value for the six-month period; then multiplying the result by the number of days in the six-month period (184); and then dividing that result by the number of days in the year (365).

## **Report of Independent Registered Public Accounting Firm**

To the Board of Trustees of Putnam Variable Trust and Shareholders of  
Putnam VT George Putnam Balanced Fund:

### ***Opinion on the Financial Statements***

We have audited the accompanying statement of assets and liabilities, including the fund's portfolio, of Putnam VT George Putnam Balanced Fund (one of the funds constituting Putnam Variable Trust, referred to hereafter as the "Fund") as of December 31, 2023, the related statement of operations for the year ended December 31, 2023, the statement of changes in net assets for each of the two years in the period ended December 31, 2023, including the related notes, and the financial highlights for each of the five years in the period ended December 31, 2023 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Fund as of December 31, 2023, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period ended December 31, 2023 and the financial highlights for each of the five years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America.

### ***Basis for Opinion***

These financial statements are the responsibility of the Fund's management. Our responsibility is to express an opinion on the Fund's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Fund in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our procedures included confirmation of securities owned as of December 31, 2023 by correspondence with the custodian, transfer agent and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP  
Boston, Massachusetts  
February 8, 2024

We have served as the auditor of one or more investment companies in the Putnam Funds family of funds since at least 1957. We have not been able to determine the specific year we began serving as auditor.

## The fund's portfolio 12/31/23

<b>COMMON STOCKS (62.1%)*</b>	<b>Shares</b>	<b>Value</b>
<b>Basic materials (2.0%)</b>		
Agnico-Eagle Mines, Ltd. (Canada)	8,751	\$479,801
Anglo American PLC (London Exchange) (United Kingdom)	5,659	142,002
Avery Dennison Corp.	1,659	335,383
Corteva, Inc.	9,184	440,097
CRH PLC (Ireland)	7,538	521,328
DuPont de Nemours, Inc.	6,614	508,815
Eastman Chemical Co.	3,973	356,855
Glencore PLC (United Kingdom)	56,053	336,275
Linde PLC	664	272,711
PPG Industries, Inc.	2,930	438,182
Sherwin-Williams Co. (The)	2,357	735,148
		<b>4,566,597</b>
<b>Capital goods (2.9%)</b>		
Ball Corp.	7,064	406,321
Berry Global Group, Inc.	3,858	259,991
Boeing Co. (The) †	847	220,779
Fortive Corp.	8,741	643,600
Honeywell International, Inc.	3,778	792,284
Howmet Aerospace, Inc.	6,773	366,555
Ingersoll Rand, Inc.	8,068	623,979
Johnson Controls International PLC	15,133	872,266
Northrop Grumman Corp.	1,687	789,752
Otis Worldwide Corp.	12,954	1,158,994
RTX Corp.	4,808	404,545
		<b>6,539,066</b>
<b>Communication services (1.1%)</b>		
American Tower Corp. <sup>R</sup>	797	172,056
Charter Communications, Inc. Class A † <sup>S</sup>	2,738	1,064,206
T-Mobile US, Inc.	7,550	1,210,492
		<b>2,446,754</b>
<b>Computers (3.6%)</b>		
Apple, Inc.	34,171	6,578,943
Seagate Technology Holdings PLC <sup>S</sup>	18,460	1,575,930
		<b>8,154,873</b>
<b>Conglomerates (0.1%)</b>		
General Electric Co.	2,262	288,699
		<b>288,699</b>
<b>Consumer cyclicals (10.4%)</b>		
4Front Ventures Corp. †	511,821	50,824
Amazon.com, Inc. †	36,718	5,578,933
BJ's Wholesale Club Holdings, Inc. †	2,073	138,186
Booking Holdings, Inc. †	331	1,174,130
CarMax, Inc. † <sup>S</sup>	4,405	338,040
General Motors Co.	5,109	183,515
Hertz Global Holdings, Inc. † <sup>S</sup>	32,023	332,719
Hilton Worldwide Holdings, Inc.	3,887	707,784
Home Depot, Inc. (The)	6,794	2,354,461
Levi Strauss & Co. Class A <sup>S</sup>	7,815	129,260
Lululemon Athletica, Inc. (Canada) †	555	283,766
Mastercard, Inc. Class A	5,755	2,454,565
Netflix, Inc. †	1,441	701,594
Nike, Inc. Class B	4,345	471,737
O'Reilly Automotive, Inc. †	299	284,074
PulteGroup, Inc.	14,878	1,535,707
S&P Global, Inc.	1,909	840,953
Target Corp.	3,807	542,193
Tesla, Inc. †	8,131	2,020,391
TJX Cos., Inc. (The)	3,054	286,496

<b>COMMON STOCKS (62.1%)* cont.</b>	<b>Shares</b>	<b>Value</b>
<b>Consumer cyclicals cont.</b>		
United Rentals, Inc. <sup>S</sup>	1,696	\$972,520
Walmart, Inc.	8,458	1,333,404
Walt Disney Co. (The) †	5,682	513,028
Warby Parker, Inc. Class A †	3,506	49,435
		<b>23,277,715</b>
<b>Consumer staples (3.4%)</b>		
Chipotle Mexican Grill, Inc. †	333	761,558
Coca-Cola Co. (The)	21,949	1,293,455
Costco Wholesale Corp.	1,408	929,393
General Mills, Inc.	5,581	363,546
Kenvue, Inc.	18,588	400,200
PepsiCo, Inc.	10,955	1,860,597
Procter & Gamble Co. (The)	14,515	2,127,028
		<b>7,735,777</b>
<b>Electronics (5.6%)</b>		
Advanced Micro Devices, Inc. †	19,718	2,906,630
Broadcom, Inc.	2,816	3,143,360
NVIDIA Corp.	8,502	4,210,360
Qualcomm, Inc.	12,167	1,759,713
Vontier Corp.	19,246	664,949
		<b>12,685,012</b>
<b>Energy (2.6%)</b>		
BP PLC (United Kingdom)	71,590	423,062
Cenovus Energy, Inc. (Canada)	48,659	810,830
ConocoPhillips	7,919	919,158
Diamond Offshore Drilling, Inc. †	22,975	298,675
Exxon Mobil Corp.	25,795	2,578,984
Shell PLC (United Kingdom)	22,757	739,356
		<b>5,770,065</b>
<b>Financials (7.2%)</b>		
AIA Group, Ltd. (Hong Kong)	104,400	906,756
Apollo Global Management, Inc. <sup>S</sup>	13,409	1,249,585
Assured Guaranty, Ltd.	21,666	1,621,267
AXA SA (France)	28,586	933,129
Bank of America Corp.	33,348	1,122,827
Capital One Financial Corp.	3,779	495,502
Charles Schwab Corp. (The)	21,863	1,504,174
Citigroup, Inc.	37,100	1,908,424
Gaming and Leisure Properties, Inc. <sup>R</sup>	19,231	949,050
Goldman Sachs Group, Inc. (The)	4,611	1,778,785
KKR & Co., Inc.	10,503	870,174
Prudential PLC (United Kingdom)	66,409	747,575
Quilter PLC (United Kingdom)	251,484	329,600
Visa, Inc. Class A	4,955	1,290,034
Vornado Realty Trust <sup>R</sup>	14,431	407,676
		<b>16,114,558</b>
<b>Health care (8.2%)</b>		
Abbott Laboratories	4,118	453,268
AbbVie, Inc.	11,945	1,851,117
Ascendis Pharma A/S ADR (Denmark) †	4,076	513,372
Bio-Rad Laboratories, Inc. Class A †	895	288,987
Biogen, Inc. †	1,367	353,739
Boston Scientific Corp. †	13,921	804,773
Cigna Group (The)	965	288,969
Danaher Corp.	3,118	721,318
Dexcom, Inc. †	4,152	515,222
Elevance Health, Inc.	416	196,169
Eli Lilly and Co.	2,625	1,530,165
Humana, Inc.	2,129	974,677
ICON PLC (Ireland) †	317	89,733
IDEXX Laboratories, Inc. †	146	81,037
Innoviva, Inc. †	42,640	683,946

<b>COMMON STOCKS (62.1%)* cont.</b>	<b>Shares</b>	<b>Value</b>
<b>Health care cont.</b>		
Intuitive Surgical, Inc. †	2,161	\$729,035
Johnson & Johnson	5,820	912,227
McKesson Corp.	2,481	1,148,653
Medtronic PLC	2,384	196,394
Merck & Co., Inc.	11,367	1,239,230
Mettler-Toledo International, Inc. †	148	179,518
Regeneron Pharmaceuticals, Inc. †	471	413,675
Stryker Corp.	1,425	426,731
Thermo Fisher Scientific, Inc.	1,777	943,214
UnitedHealth Group, Inc.	4,917	2,588,653
Zoetis, Inc.	1,322	260,923
		<b>18,384,745</b>
<b>Software (7.1%)</b>		
Adobe, Inc. †	2,328	1,388,885
Microsoft Corp.	30,164	11,342,872
Oracle Corp.	30,776	3,244,714
		<b>15,976,471</b>
<b>Technology services (5.0%)</b>		
Alphabet, Inc. Class A †	41,444	5,789,312
Meta Platforms, Inc. Class A †	9,107	3,223,514
Salesforce, Inc. †	8,544	2,248,268
		<b>11,261,094</b>
<b>Transportation (1.3%)</b>		
Canadian Pacific Kansas City, Ltd. (Canada) <sup>S</sup>	6,863	542,589
FedEx Corp.	4,587	1,160,373
Southwest Airlines Co.	12,790	369,375
Union Pacific Corp.	3,798	932,865
		<b>3,005,202</b>
<b>Utilities and power (1.6%)</b>		
Ameren Corp.	4,383	317,066
Dominion Energy, Inc.	4,533	213,051
Exelon Corp.	14,888	534,479
NextEra Energy, Inc.	11,205	680,592
NRG Energy, Inc. <sup>S</sup>	28,517	1,474,329
PG&E Corp. †	25,862	466,292
		<b>3,685,809</b>
<b>Total common stocks (cost \$88,808,429)</b>		<b>\$139,892,437</b>

<b>CORPORATE BONDS AND NOTES (14.9%)*</b>	<b>Principal amount</b>	<b>Value</b>
<b>Basic materials (0.9%)</b>		
Celanese US Holdings, LLC company guaranty sr. unsec. notes 6.55%, 11/15/30 (Germany)	\$65,000	\$68,713
Celanese US Holdings, LLC company guaranty sr. unsec. notes 6.33%, 7/15/29 (Germany)	28,000	29,352
Celanese US Holdings, LLC company guaranty sr. unsec. notes 6.165%, 7/15/27 (Germany)	142,000	145,601
Celanese US Holdings, LLC company guaranty sr. unsec. notes 3.50%, 5/8/24 (Germany)	40,000	39,625
Celanese US Holdings, LLC company guaranty sr. unsec. notes 1.40%, 8/5/26 (Germany)	95,000	86,570
CF Industries, Inc. company guaranty sr. unsec. bonds 4.95%, 6/1/43	174,000	159,039
CF Industries, Inc. 144A company guaranty sr. notes 4.50%, 12/1/26	13,000	12,711
FMC Corp. sr. unsec. unsub. notes 5.65%, 5/18/33	125,000	124,536
Georgia-Pacific, LLC 144A sr. unsec. sub. notes 2.10%, 4/30/27	200,000	184,316
Glencore Finance Canada, Ltd. 144A company guaranty sr. unsec. unsub. notes 6.00%, 11/15/41 (Canada)	5,000	5,088

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Basic materials cont.</b>		
Glencore Funding, LLC 144A company guaranty sr. unsec. notes 4.125%, 3/12/24	\$40,000	\$39,854
Glencore Funding, LLC 144A company guaranty sr. unsec. notes 2.50%, 9/1/30	258,000	221,353
Huntsman International, LLC sr. unsec. notes 4.50%, 5/1/29	210,000	202,291
International Flavors & Fragrances, Inc. sr. unsec. notes 4.45%, 9/26/28	80,000	78,030
International Flavors & Fragrances, Inc. 144A company guaranty sr. unsec. bonds 3.468%, 12/1/50	27,000	18,427
International Flavors & Fragrances, Inc. 144A sr. unsec. notes 2.30%, 11/1/30	48,000	39,690
Nutrien, Ltd. sr. unsec. notes 4.00%, 12/15/26 (Canada)	152,000	148,619
Sherwin-Williams Co. (The) sr. unsec. unsub. bonds 3.45%, 6/1/27	87,000	83,977
Westlake Corp. sr. unsec. bonds 3.125%, 8/15/51	233,000	154,021
Westlake Corp. sr. unsec. bonds 2.875%, 8/15/41	117,000	82,028
WestRock MWV, LLC company guaranty sr. unsec. unsub. notes 8.20%, 1/15/30	140,000	161,245
WestRock MWV, LLC company guaranty sr. unsec. unsub. notes 7.95%, 2/15/31	10,000	11,653
Weyerhaeuser Co. sr. unsec. unsub. notes 7.375%, 3/15/32 <sup>R</sup>	24,000	27,851
		<b>2,124,590</b>
<b>Capital goods (0.8%)</b>		
Berry Global Escrow Corp. 144A sr. notes 4.875%, 7/15/26	8,000	7,862
Berry Global, Inc. 144A company guaranty sr. notes 1.65%, 1/15/27	135,000	121,544
Berry Global, Inc. 144A company guaranty sr. notes 1.57%, 1/15/26	152,000	141,207
Boeing Co. (The) sr. unsec. notes 2.196%, 2/4/26	180,000	170,080
Boeing Co. (The) sr. unsec. unsub. bonds 3.375%, 6/15/46	40,000	29,387
Boeing Co. (The) sr. unsec. unsub. notes 6.125%, 2/15/33	140,000	150,951
Howmet Aerospace, Inc. sr. unsec. unsub. notes 3.00%, 1/15/29	117,000	106,909
L3Harris Technologies, Inc. sr. unsec. notes 3.85%, 12/15/26	242,000	237,191
Northrop Grumman Corp. sr. unsec. unsub. notes 3.25%, 1/15/28	210,000	200,672
Oshkosh Corp. sr. unsec. sub. notes 4.60%, 5/15/28	99,000	97,552
Oshkosh Corp. sr. unsec. unsub. notes 3.10%, 3/1/30	21,000	18,876
Raytheon Technologies Corp. sr. unsec. unsub. bonds 6.40%, 3/15/54	135,000	156,287
RTX Corp. sr. unsec. notes 5.15%, 2/27/33	50,000	50,957
Waste Connections, Inc. sr. unsec. bonds 4.20%, 1/15/33	40,000	38,839
Waste Connections, Inc. sr. unsec. notes 4.25%, 12/1/28	166,000	165,167
Waste Management, Inc. company guaranty sr. unsec. notes 4.875%, 2/15/29	110,000	112,573
		<b>1,806,054</b>
<b>Communication services (1.3%)</b>		
American Tower Corp. sr. unsec. bonds 2.70%, 4/15/31 <sup>R</sup>	130,000	111,632
American Tower Corp. sr. unsec. notes 3.125%, 1/15/27 <sup>R</sup>	230,000	217,385

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Communication services cont.</b>		
American Tower Corp. sr. unsec. notes 2.90%, 1/15/30 <b>R</b>	\$130,000	\$115,687
American Tower Corp. sr. unsec. sub. notes 2.75%, 1/15/27 <b>R</b>	66,000	61,864
AT&T, Inc. company guaranty sr. unsec. unsub. notes 2.30%, 6/1/27	175,000	162,434
AT&T, Inc. sr. unsec. unsub. bonds 2.55%, 12/1/33	172,000	140,184
AT&T, Inc. sr. unsec. unsub. bonds 2.25%, 2/1/32	147,000	121,560
AT&T, Inc. sr. unsec. unsub. notes 4.75%, 5/15/46	12,000	10,846
Charter Communications Operating, LLC/Charter Communications Operating Capital Corp. company guaranty sr. notes 2.25%, 1/15/29	55,000	47,722
Charter Communications Operating, LLC/Charter Communications Operating Capital Corp. company guaranty sr. sub. bonds 6.484%, 10/23/45	111,000	109,070
Charter Communications Operating, LLC/Charter Communications Operating Capital Corp. sr. bonds 3.70%, 4/1/51	5,000	3,252
Comcast Corp. company guaranty sr. unsec. notes 3.45%, 2/1/50	201,000	154,280
Comcast Corp. company guaranty sr. unsec. unsub. bonds 3.999%, 11/1/49	127,000	105,982
Comcast Corp. company guaranty sr. unsec. unsub. bonds 2.35%, 1/15/27	68,000	63,835
Cox Communications, Inc. 144A sr. unsec. bonds 3.50%, 8/15/27	73,000	69,465
Crown Castle, Inc. sr. unsec. bonds 3.80%, 2/15/28 <b>R</b>	134,000	127,289
Crown Castle, Inc. sr. unsec. bonds 3.65%, 9/1/27 <b>R</b>	66,000	62,739
Crown Castle, Inc. sr. unsec. notes 4.75%, 5/15/47 <b>R</b>	30,000	25,987
Equinix, Inc. sr. unsec. sub. notes 3.20%, 11/18/29 <b>R</b>	194,000	178,176
Rogers Communications, Inc. company guaranty sr. unsec. bonds 8.75%, 5/1/32 (Canada)	10,000	11,864
Rogers Communications, Inc. company guaranty sr. unsec. unsub. notes Ser. REGS, 3.80%, 3/15/32 (Canada)	81,000	74,538
Sprint Capital Corp. company guaranty sr. unsec. unsub. notes 6.875%, 11/15/28	198,000	214,539
T-Mobile USA, Inc. company guaranty sr. notes 3.875%, 4/15/30	6,000	5,690
T-Mobile USA, Inc. company guaranty sr. notes 3.75%, 4/15/27	229,000	222,113
T-Mobile USA, Inc. company guaranty sr. unsec. bonds 5.75%, 1/15/54	5,000	5,290
T-Mobile USA, Inc. company guaranty sr. unsec. bonds 5.05%, 7/15/33	80,000	80,482
Time Warner Cable Enterprises, LLC company guaranty sr. unsub. notes 8.375%, 7/15/33	85,000	98,420
Verizon Communications, Inc. sr. unsec. bonds 3.70%, 3/22/61	123,000	93,966
Verizon Communications, Inc. sr. unsec. unsub. notes 4.329%, 9/21/28	200,000	197,851
Verizon Communications, Inc. sr. unsec. unsub. notes 2.355%, 3/15/32	140,000	116,448
	<b>3,010,590</b>	

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Consumer cyclicals (1.1%)</b>		
Alimentation Couche-Tard, Inc. 144A company guaranty sr. unsec. notes 3.55%, 7/26/27 (Canada)	\$120,000	\$115,050
Alimentation Couche-Tard, Inc. 144A sr. unsec. notes 2.95%, 1/25/30 (Canada)	131,000	117,264
Amazon.com, Inc. sr. unsec. notes 3.15%, 8/22/27	98,000	94,057
Amazon.com, Inc. sr. unsec. unsub. bonds 2.70%, 6/3/60	174,000	115,048
Amazon.com, Inc. sr. unsec. unsub. notes 2.10%, 5/12/31	87,000	75,021
Autonation, Inc. company guaranty sr. unsec. notes 4.50%, 10/1/25	13,000	12,727
BMW US Capital, LLC 144A company guaranty sr. unsec. notes 3.95%, 8/14/28	77,000	74,777
Booking Holdings, Inc. sr. unsec. sub. notes 4.625%, 4/13/30	155,000	156,160
Discovery Communications, LLC company guaranty sr. unsec. unsub. notes 3.625%, 5/15/30	3,000	2,719
Ecolab, Inc. sr. unsec. unsub. notes 3.25%, 12/1/27	122,000	117,051
Gartner, Inc. 144A company guaranty sr. unsec. bonds 3.75%, 10/1/30	77,000	68,066
Gartner, Inc. 144A company guaranty sr. unsec. notes 3.625%, 6/15/29	18,000	16,247
Interpublic Group of Cos., Inc. (The) sr. unsec. sub. bonds 4.65%, 10/1/28	197,000	195,000
Lennar Corp. company guaranty sr. unsec. unsub. notes 4.75%, 11/29/27	189,000	188,566
Netflix, Inc. sr. unsec. unsub. notes 4.375%, 11/15/26	215,000	213,982
Netflix, Inc. 144A sr. unsec. bonds 5.375%, 11/15/29	74,000	76,451
Omnicom Group, Inc. company guaranty sr. unsec. unsub. notes 3.60%, 4/15/26	42,000	40,931
Paramount Global sr. unsec. unsub. notes 4.20%, 6/1/29	60,000	56,069
Paramount Global sr. unsec. unsub. notes 2.90%, 1/15/27	26,000	24,060
S&P Global, Inc. company guaranty sr. unsec. bonds 2.50%, 12/1/29	175,000	157,518
S&P Global, Inc. company guaranty sr. unsec. notes 1.25%, 8/15/30	56,000	45,838
Stellantis Finance US, Inc. 144A company guaranty sr. unsec. notes 1.711%, 1/29/27	200,000	181,473
Tapestry, Inc. company guaranty sr. unsec. notes 7.85%, 11/27/33	41,000	43,742
Tapestry, Inc. company guaranty sr. unsec. notes 7.70%, 11/27/30	54,000	56,846
Warnermedia Holdings, Inc. company guaranty sr. unsec. bonds 5.05%, 3/15/42	25,000	22,040
Warnermedia Holdings, Inc. company guaranty sr. unsec. notes 3.755%, 3/15/27	298,000	285,538
	<b>2,552,241</b>	
<b>Consumer staples (0.6%)</b>		
Ashtead Capital, Inc. 144A notes 4.375%, 8/15/27	200,000	192,023
ERAC USA Finance, LLC 144A company guaranty sr. unsec. notes 7.00%, 10/15/37	150,000	175,289
ERAC USA Finance, LLC 144A company guaranty sr. unsec. notes 5.625%, 3/15/42	87,000	90,264
ERAC USA Finance, LLC 144A company guaranty sr. unsec. notes 3.85%, 11/15/24	130,000	128,114

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Consumer staples cont.</b>		
JBS USA LUX SA/JBS USA Food Co./JBS Luxembourg SARL 144A company guaranty sr. unsec. bonds 6.75%, 3/15/34	\$140,000	\$147,508
JBS USA LUX SA/JBS USA Food Co./JBS USA Finance, Inc. company guaranty sr. unsec. notes 3.00%, 2/2/29	135,000	118,745
Kenvue, Inc. company guaranty sr. unsec. notes Ser. REGS, 4.90%, 3/22/33	210,000	216,466
Kenvue, Inc. company guaranty sr. unsec. unsub. notes Ser. REGS, 5.05%, 3/22/53	38,000	39,315
Kenvue, Inc. company guaranty sr. unsec. unsub. notes Ser. REGS, 5.05%, 3/22/28	32,000	32,782
McCormick & Co., Inc. sr. unsec. notes 1.85%, 2/15/31	14,000	11,448
McDonald's Corp. sr. unsec. unsub. bonds Ser. MTN, 6.30%, 10/15/37	80,000	90,591
		<b>1,242,545</b>
<b>Energy (0.6%)</b>		
Cheniere Energy Partners LP company guaranty sr. unsec. notes 4.50%, 10/1/29	200,000	191,293
Cheniere Energy Partners LP company guaranty sr. unsec. unsub. notes 3.25%, 1/31/32	70,000	59,642
Columbia Pipelines Operating Co., LLC 144A sr. unsec. bonds 6.544%, 11/15/53	75,000	82,738
Columbia Pipelines Operating Co., LLC 144A sr. unsec. notes 5.927%, 8/15/30	70,000	72,516
Diamondback Energy, Inc. company guaranty sr. unsec. notes 6.25%, 3/15/33	115,000	122,880
Diamondback Energy, Inc. company guaranty sr. unsec. notes 3.25%, 12/1/26	105,000	101,691
Kinetik Holdings LP 144A company guaranty sr. unsec. notes 5.875%, 6/15/30	115,000	112,821
Occidental Petroleum Corp. sr. unsec. sub. notes 7.50%, 5/1/31	235,000	263,516
ONEOK, Inc. company guaranty sr. unsec. sub. bonds 6.05%, 9/1/33	10,000	10,595
ONEOK, Inc. company guaranty sr. unsec. unsub. notes 6.10%, 11/15/32	130,000	138,137
Ovintiv, Inc. company guaranty sr. unsec. bonds 6.25%, 7/15/33	27,000	27,912
Ovintiv, Inc. company guaranty sr. unsec. notes 5.65%, 5/15/28	35,000	35,712
Ovintiv, Inc. company guaranty sr. unsec. notes 5.65%, 5/15/25	28,000	28,121
Targa Resources Partners LP/Targa Resources Partners Finance Corp. company guaranty sr. unsec. unsub. notes 4.875%, 2/1/31	135,000	131,140
		<b>1,378,714</b>
<b>Financials (5.1%)</b>		
AerCap Ireland Capital DAC/AerCap Global Aviation Trust company guaranty sr. unsec. bonds 3.30%, 1/30/32 (Ireland)	270,000	234,989
Air Lease Corp. sr. unsec. notes Ser. MTN, 3.00%, 2/1/30	195,000	172,998
Air Lease Corp. sr. unsec. sub. bonds 4.625%, 10/1/28	27,000	26,379
Air Lease Corp. sr. unsec. sub. notes 3.25%, 10/1/29	32,000	28,906
Ally Financial, Inc. company guaranty sr. unsec. notes 8.00%, 11/1/31	90,000	98,595
American Express Co. sr. unsec. unsub. notes 3.375%, 5/3/24	180,000	178,619
Aon PLC company guaranty sr. unsec. unsub. notes 4.25%, 12/12/42	220,000	177,796

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Financials cont.</b>		
Ares Capital Corp. sr. unsec. sub. notes 7.00%, 1/15/27	\$40,000	\$41,144
Ares Capital Corp. sr. unsec. sub. notes 3.875%, 1/15/26	205,000	196,934
Athene Holding, Ltd. sr. unsec. bonds 5.875%, 1/15/34	164,000	165,500
Australia and New Zealand Banking Group, Ltd. 144A unsec. sub. FRB 2.57%, 11/25/35 (Australia)	200,000	161,297
Banco Santander SA sr. unsec. unsub. FRN 1.722%, 9/14/27 (Spain)	600,000	542,590
Bank of America Corp. jr. unsec. sub. FRN Ser. AA, 6.10%, perpetual maturity	32,000	31,696
Bank of America Corp. sr. unsec. FRN Ser. MTN, 2.551%, 2/4/28	70,000	64,843
Bank of America Corp. unsec. sub. FRB 3.846%, 3/8/37	440,000	386,323
Bank of America Corp. unsec. sub. notes 6.11%, 1/29/37	150,000	159,928
Bank of Montreal unsec. sub. FRN 3.803%, 12/15/32 (Canada)	45,000	41,396
Berkshire Hathaway Finance Corp. company guaranty sr. unsec. bonds 2.85%, 10/15/50	30,000	21,007
Berkshire Hathaway Finance Corp. company guaranty sr. unsec. notes 4.30%, 5/15/43	83,000	77,664
BNP Paribas SA 144A jr. unsec. sub. FRN 4.625%, perpetual maturity (France)	200,000	161,095
BPCE SA 144A unsec. sub. notes 5.15%, 7/21/24 (France)	200,000	198,259
Capital One Financial Corp. sr. unsec. unsub. FRN 7.624%, 10/30/31	37,000	40,659
Capital One Financial Corp. sr. unsec. unsub. notes 3.75%, 3/9/27	142,000	135,583
Capital One Financial Corp. unsec. sub. notes 4.20%, 10/29/25	63,000	61,763
Citigroup, Inc. jr. unsec. sub. FRN 3.875%, perpetual maturity	137,000	121,289
Citigroup, Inc. sr. unsec. FRB 3.668%, 7/24/28	10,000	9,530
Citigroup, Inc. sr. unsec. FRN 5.61%, 9/29/26	265,000	266,931
Citigroup, Inc. sub. unsec. bonds 6.174%, 5/25/34	37,000	38,287
Citigroup, Inc. unsec. sub. bonds 4.75%, 5/18/46	270,000	241,467
Citigroup, Inc. unsec. sub. bonds 4.45%, 9/29/27	264,000	257,930
CNO Financial Group, Inc. sr. unsec. unsub. notes 5.25%, 5/30/25	28,000	27,805
Corebridge Financial, Inc. sr. unsec. notes 3.85%, 4/5/29	95,000	89,519
Deutsche Bank AG/New York, NY sr. unsec. unsub. FRN 2.311%, 11/16/27 (Germany)	150,000	137,159
Deutsche Bank AG/New York, NY unsec. sub. FRB 3.729%, 1/14/32 (Germany)	225,000	188,586
EPR Properties company guaranty sr. unsec. unsub. notes 4.50%, 6/1/27 <sup>R</sup>	32,000	30,176
Extra Space Storage LP company guaranty sr. unsec. notes 5.90%, 1/15/31 <sup>R</sup>	170,000	177,433
Fairfax Financial Holdings, Ltd. sr. unsec. notes 4.85%, 4/17/28 (Canada)	145,000	142,752
Fairfax US, Inc. 144A company guaranty sr. unsec. notes 4.875%, 8/13/24	40,000	39,920
Fidelity National Financial, Inc. sr. unsec. bonds 3.20%, 9/17/51	72,000	45,601
Fifth Third Bancorp sr. unsec. unsub. FRN 6.339%, 7/27/29	100,000	104,118
First-Citizens Bank & Trust Co. unsec. sub. notes 6.125%, 3/9/28	157,000	159,729

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Financials cont.</b>		
General Motors Financial Co., Inc. company guaranty sr. unsec. notes 4.00%, 10/6/26	\$40,000	\$38,915
General Motors Financial Co., Inc. sr. unsec. notes 6.40%, 1/9/33	115,000	122,372
General Motors Financial Co., Inc. sr. unsec. notes 1.25%, 1/8/26	47,000	43,485
General Motors Financial Co., Inc. sr. unsec. sub. notes 1.50%, 6/10/26	40,000	36,651
GLP Capital LP/GLP Financing II, Inc. company guaranty sr. unsec. bonds 3.25%, 1/15/32 <b>R</b>	65,000	54,876
GLP Capital LP/GLP Financing II, Inc. company guaranty sr. unsec. sub. notes 6.75%, 12/1/33 <b>R</b>	95,000	102,489
Goldman Sachs Group, Inc. (The) jr. unsec. sub. FRN 3.65%, 7/28/51	26,000	23,056
Goldman Sachs Group, Inc. (The) sr. unsec. FRB 4.223%, 5/1/29	97,000	93,831
Goldman Sachs Group, Inc. (The) sr. unsec. unsub. notes 2.60%, 2/7/30	450,000	395,434
Goldman Sachs Group, Inc. (The) sr. unsec. unsub. notes 5.70%, 11/1/24	185,000	185,441
Intercontinental Exchange, Inc. sr. unsec. bonds 2.65%, 9/15/40	127,000	94,518
Intercontinental Exchange, Inc. sr. unsec. bonds 1.85%, 9/15/32	63,000	50,384
Intercontinental Exchange, Inc. sr. unsec. notes 4.35%, 6/15/29	63,000	62,796
Intesa Sanpaolo SpA 144A unsec. sub. bonds 4.198%, 6/1/32 (Italy)	220,000	181,405
JPMorgan Chase & Co. jr. unsec. bonds 6.10%, perpetual maturity	26,000	25,857
JPMorgan Chase & Co. jr. unsec. sub. FRB Ser. HH, 4.60%, perpetual maturity	146,000	140,791
JPMorgan Chase & Co. jr. unsec. sub. FRB Ser. W, (CME Term SOFR 3 Month + 1.26%), 6.641%, 5/15/47	87,000	74,431
JPMorgan Chase & Co. jr. unsec. sub. FRN 3.65%, perpetual maturity	26,000	23,793
JPMorgan Chase & Co. sr. unsec. unsub. FRB 3.964%, 11/15/48	185,000	154,882
JPMorgan Chase & Co. sr. unsec. unsub. FRN 3.782%, 2/1/28	324,000	312,945
KKR Group Finance Co. VI, LLC 144A company guaranty sr. unsec. bonds 3.75%, 7/1/29	25,000	23,455
LPL Holdings, Inc. company guaranty sr. unsec. notes 6.75%, 11/17/28	67,000	71,423
Marsh & McLennan Cos., Inc. sr. unsec. sub. notes 4.375%, 3/15/29	185,000	184,081
Massachusetts Mutual Life Insurance Co. 144A unsec. sub. bonds 3.729%, 10/15/70	175,000	120,154
MetLife Capital Trust IV 144A jr. unsec. sub. notes 7.875%, 12/15/37	400,000	429,631
Morgan Stanley sr. unsec. notes 5.123%, 2/1/29	105,000	105,478
Morgan Stanley unsec. sub. notes Ser. GMTN, 4.35%, 9/8/26	450,000	441,614
Nasdaq, Inc. sr. unsec. bonds 5.95%, 8/15/53	26,000	27,927
Nasdaq, Inc. sr. unsec. sub. bonds 5.55%, 2/15/34	24,000	24,932
NatWest Group PLC sr. unsec. unsub. FRN 5.847%, 3/2/27 (United Kingdom)	200,000	201,810
Neuberger Berman Group, LLC/Neuberger Berman Finance Corp. 144A sr. unsec. notes 4.875%, 4/15/45	40,000	33,016
PNC Financial Services Group, Inc. (The) unsec. sub. FRB 4.626%, 6/6/33	365,000	344,174

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Financials cont.</b>		
Prologis LP sr. unsec. unsub. notes 2.25%, 4/15/30 <b>R</b>	\$62,000	\$54,199
Prologis LP sr. unsec. unsub. notes 2.125%, 4/15/27 <b>R</b>	26,000	24,017
Prudential Financial, Inc. sr. unsec. notes 6.625%, 6/21/40	35,000	39,867
Royal Bank of Canada unsec. sub. notes Ser. GMTN, 4.65%, 1/27/26 (Canada)	35,000	34,703
Societe Generale SA 144A jr. unsec. sub. FRB 10.00%, 11/14/73 (France)	200,000	213,750
Teachers Insurance & Annuity Association of America 144A unsec. sub. notes 6.85%, 12/16/39	40,000	46,085
Toronto-Dominion Bank (The) sr. unsec. notes 4.108%, 6/8/27 (Canada)	76,000	74,647
UBS AG unsec. sub. notes 5.125%, 5/15/24 (Switzerland)	360,000	357,682
UBS Group AG 144A sr. unsec. FRN 2.193%, 6/5/26 (Switzerland)	250,000	237,746
US Bancorp unsec. sub. FRB 2.491%, 11/3/36	225,000	174,495
VICI Properties LP sr. unsec. unsub. notes 4.75%, 2/15/28 <b>R</b>	95,000	93,001
VICI Properties LP/VICI Note Co., Inc. 144A company guaranty sr. unsec. notes 3.75%, 2/15/27 <b>R</b>	35,000	33,038
Wells Fargo & Co. jr. unsec. sub. FRN 3.90%, perpetual maturity	80,000	73,917
Westpac Banking Corp. unsec. sub. bonds 4.421%, 7/24/39 (Australia)	85,000	74,132
Westpac Banking Corp. unsec. sub. bonds 2.963%, 11/16/40 (Australia)	79,000	54,698
		<b>11,296,219</b>
<b>Health care (1.2%)</b>		
Amgen, Inc. sr. unsec. bonds 4.663%, 6/15/51	83,000	75,443
Amgen, Inc. sr. unsec. unsub. bonds 5.75%, 3/2/63	90,000	94,423
Amgen, Inc. sr. unsec. unsub. bonds 5.65%, 3/2/53	48,000	50,472
Amgen, Inc. sr. unsec. unsub. notes 5.25%, 3/2/30	98,000	100,600
Amgen, Inc. sr. unsec. unsub. notes 2.60%, 8/19/26	33,000	31,358
Becton, Dickinson and Co. sr. unsec. notes 2.823%, 5/20/30	110,000	98,314
CVS Pass-Through Trust 144A sr. mtge. notes 7.507%, 1/10/32	95,429	100,374
CVS Pass-Through Trust 144A sr. mtge. notes 4.704%, 1/10/36	10,084	9,363
DH Europe Finance II SARL company guaranty sr. unsec. notes 2.60%, 11/15/29 (Luxembourg)	80,000	72,323
Eli Lilly and Co. sr. unsec. unsub. bonds 4.875%, 2/27/53	55,000	56,885
GE Healthcare Holding, LLC company guaranty sr. unsec. notes 5.65%, 11/15/27	100,000	103,505
HCA, Inc. company guaranty sr. bonds 5.25%, 6/15/26	67,000	67,327
HCA, Inc. company guaranty sr. unsec. notes 5.375%, 9/1/26	58,000	58,266
HCA, Inc. company guaranty sr. unsec. sub. notes 3.625%, 3/15/32	35,000	31,296
HCA, Inc. company guaranty sr. unsec. unsub. notes 5.375%, 2/1/25	10,000	9,985

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Health care cont.</b>		
Humana, Inc. sr. unsec. unsub. bonds 5.50%, 3/15/53	\$30,000	\$31,112
Humana, Inc. sr. unsec. unsub. notes 5.75%, 3/1/28	130,000	135,087
Pfizer Investment Enterprises PTE, Ltd. company guaranty sr. unsec. notes 5.30%, 5/19/53 (Singapore)	90,000	91,880
Pfizer Investment Enterprises PTE, Ltd. company guaranty sr. unsec. notes 4.75%, 5/19/33 (Singapore)	126,000	126,283
Pfizer Investment Enterprises PTE, Ltd. company guaranty sr. unsec. notes 4.45%, 5/19/28 (Singapore)	74,000	73,962
Service Corp. International sr. unsec. notes 4.625%, 12/15/27	30,000	29,025
Service Corp. International sr. unsec. notes 3.375%, 8/15/30	20,000	17,442
Service Corp. International sr. unsec. sub. notes 4.00%, 5/15/31	165,000	147,758
Thermo Fisher Scientific, Inc. sr. unsec. notes 5.00%, 1/31/29	180,000	184,760
Thermo Fisher Scientific, Inc. sr. unsec. notes 4.80%, 11/21/27	210,000	213,927
UnitedHealth Group, Inc. sr. unsec. notes 2.95%, 10/15/27	190,000	180,380
UnitedHealth Group, Inc. sr. unsec. unsub. notes 5.25%, 2/15/28	230,000	237,836
Viatrix, Inc. company guaranty sr. unsec. notes 2.30%, 6/22/27	75,000	68,020
Wyeth, LLC company guaranty sr. unsec. bonds 5.95%, 4/1/37	50,000	55,014
Zoetis, Inc. sr. unsec. notes 3.90%, 8/20/28	111,000	108,614
Zoetis, Inc. sr. unsec. sub. notes 3.00%, 9/12/27	90,000	85,362
Zoetis, Inc. sr. unsec. sub. notes 2.00%, 5/15/30	39,000	33,582
		<b>2,779,978</b>
<b>Technology (1.5%)</b>		
Alphabet, Inc. sr. unsec. notes 1.998%, 8/15/26	84,000	79,327
Apple, Inc. sr. unsec. bonds 3.95%, 8/8/52	138,000	120,777
Apple, Inc. sr. unsec. unsub. notes 4.375%, 5/13/45	150,000	142,239
Broadcom, Inc. company guaranty sr. unsec. bonds 4.15%, 11/15/30	152,000	145,187
Broadcom, Inc. 144A sr. unsec. bonds 4.926%, 5/15/37	345,000	333,867
Broadcom, Inc. 144A sr. unsec. bonds 3.187%, 11/15/36	72,000	58,346
Dell International, LLC/EMC Corp. company guaranty sr. bonds 8.35%, 7/15/46	3,000	3,940
Fidelity National Information Services, Inc. sr. unsec. bonds 3.10%, 3/1/41	41,000	30,394
Fidelity National Information Services, Inc. sr. unsec. notes 2.25%, 3/1/31	20,000	16,896
Fidelity National Information Services, Inc. sr. unsec. unsub. notes 5.10%, 7/15/32	34,000	34,716
Marvell Technology, Inc. sr. unsec. notes 5.95%, 9/15/33	100,000	106,039
Marvell Technology, Inc. sr. unsec. notes 5.75%, 2/15/29	100,000	103,320
Meta Platforms, Inc. sr. unsec. bonds 5.60%, 5/15/53	264,000	286,132
Meta Platforms, Inc. sr. unsec. notes 4.95%, 5/15/33	70,000	72,248

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Technology cont.</b>		
Meta Platforms, Inc. sr. unsec. unsub. bonds 4.45%, 8/15/52	\$108,000	\$99,230
Meta Platforms, Inc. sr. unsec. unsub. notes 3.50%, 8/15/27	60,000	58,427
Micron Technology, Inc. sr. unsec. unsub. notes 5.875%, 9/15/33	185,000	192,415
Microsoft Corp. sr. unsec. unsub. bonds 2.921%, 3/17/52	371,000	273,811
Microsoft Corp. sr. unsec. unsub. bonds 2.40%, 8/8/26	66,000	62,890
MSCI, Inc. 144A company guaranty sr. unsec. notes 3.625%, 9/1/30	201,000	181,864
Oracle Corp. sr. unsec. bonds 3.95%, 3/25/51	50,000	39,153
Oracle Corp. sr. unsec. bonds 3.65%, 3/25/41	225,000	178,450
Oracle Corp. sr. unsec. notes 1.65%, 3/25/26	180,000	167,918
salesforce.com, Inc. sr. unsec. bonds 3.05%, 7/15/61	68,000	47,704
salesforce.com, Inc. sr. unsec. bonds 2.90%, 7/15/51	185,000	132,279
Sensata Technologies, Inc. 144A company guaranty sr. unsec. notes 3.75%, 2/15/31	170,000	149,724
ServiceNow, Inc. sr. unsec. notes 1.40%, 9/1/30	200,000	164,419
		<b>3,281,712</b>
<b>Transportation (0.1%)</b>		
Penske Truck Leasing Co. LP/PTL Finance Corp. 144A sr. unsec. bonds 3.40%, 11/15/26	86,000	81,494
Penske Truck Leasing Co. LP/PTL Finance Corp. 144A sr. unsec. notes 4.40%, 7/1/27	260,000	253,506
		<b>335,000</b>
<b>Utilities and power (1.7%)</b>		
AES Corp. (The) sr. unsec. unsub. notes 2.45%, 1/15/31	135,000	113,405
Alexander Funding Trust II 144A sr. notes 7.467%, 7/31/28	100,000	105,004
American Electric Power Co., Inc. sr. unsec. unsub. bonds 5.625%, 3/1/33	55,000	57,345
American Electric Power Co., Inc. sr. unsec. unsub. notes Ser. J, 4.30%, 12/1/28	66,000	64,527
American Transmission Systems, Inc. 144A sr. unsec. bonds 2.65%, 1/15/32	50,000	42,302
Appalachian Power Co. sr. unsec. unsub. notes Ser. L, 5.80%, 10/1/35	60,000	60,578
Commonwealth Edison Co. sr. mtge. bonds 5.875%, 2/1/33	15,000	15,856
Consolidated Edison Co. of New York, Inc. sr. unsec. unsub. notes 4.20%, 3/15/42	40,000	34,567
Constellation Energy Generation, LLC sr. unsec. bonds 6.50%, 10/1/53	149,000	168,029
Constellation Energy Generation, LLC sr. unsec. bonds 6.125%, 1/15/34	61,000	65,275
Duke Energy Ohio, Inc. sr. bonds 3.65%, 2/1/29	130,000	125,127
El Paso Natural Gas Co., LLC company guaranty sr. unsec. unsub. notes 8.375%, 6/15/32	75,000	87,391
Electricite De France SA 144A sr. unsec. unsub. bonds 4.75%, 10/13/35 (France)	150,000	142,257
Enbridge, Inc. sr. unsec. unsub. bonds 4.25%, 12/1/26 (Canada)	42,000	41,434
Energy Transfer LP jr. unsec. sub. FRN 6.625%, perpetual maturity	257,000	214,592
Energy Transfer LP sr. unsec. unsub. notes 6.50%, 2/1/42	20,000	21,118
Enterprise Products Operating, LLC company guaranty sr. unsec. notes 2.80%, 1/31/30	230,000	208,003

<b>CORPORATE BONDS AND NOTES (14.9%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
<b>Utilities and power cont.</b>		
Enterprise Products Operating, LLC company guaranty sr. unsec. unsub. bonds 4.25%, 2/15/48	\$65,000	\$57,082
Eversource Energy sr. unsec. unsub. notes 5.45%, 3/1/28	60,000	61,669
Eversource Energy sr. unsec. unsub. notes 5.125%, 5/15/33	140,000	140,707
Georgia Power Co. sr. unsec. unsub. notes 4.95%, 5/17/33	120,000	120,968
IPALCO Enterprises, Inc. sr. notes 4.25%, 5/1/30	116,000	107,175
IPALCO Enterprises, Inc. sr. sub. notes 3.70%, 9/1/24	35,000	34,445
Kinder Morgan Energy Partners LP company guaranty sr. unsec. notes 5.40%, 9/1/44	16,000	14,970
Kinder Morgan, Inc. company guaranty sr. unsec. notes Ser. GMTN, 7.75%, 1/15/32	55,000	62,529
NextEra Energy Capital Holdings, Inc. company guaranty sr. unsec. unsub. notes 6.051%, 3/1/25	110,000	110,980
NRG Energy, Inc. 144A company guaranty sr. notes 3.75%, 6/15/24	80,000	79,070
NRG Energy, Inc. 144A sr. notes 2.45%, 12/2/27	114,000	102,781
Oncor Electric Delivery Co., LLC sr. notes 5.75%, 3/15/29	55,000	58,049
Oncor Electric Delivery Co., LLC 144A sr. bonds 4.95%, 9/15/52	115,000	113,063
Pacific Gas and Electric Co. notes 2.10%, 8/1/27	30,000	27,037
Pacific Gas and Electric Co. sr. bonds 5.90%, 6/15/32	68,000	69,143
Pacific Gas and Electric Co. sr. bonds 4.95%, 7/1/50	70,000	59,793
Pacific Gas and Electric Co. sr. notes 3.30%, 12/1/27	130,000	121,331
PacifiCorp sr. bonds 2.70%, 9/15/30	86,000	74,520
Puget Sound Energy, Inc. sr. bonds 5.448%, 6/1/53	75,000	77,851
Sempra Energy sr. unsec. unsub. bonds 5.50%, 8/1/33	75,000	77,734
Southern Co. (The) sr. unsec. bonds 5.70%, 3/15/34	70,000	73,607
Sunoco Logistics Partners Operations LP company guaranty sr. unsec. unsub. notes 5.95%, 12/1/25	25,000	25,265
Vistra Operations Co., LLC 144A company guaranty sr. notes 4.30%, 7/15/29	58,000	54,267
Vistra Operations Co., LLC 144A company guaranty sr. notes 3.55%, 7/15/24	67,000	66,057
Vistra Operations Co., LLC 144A sr. bonds 6.95%, 10/15/33	85,000	89,457
WEC Energy Group, Inc. jr. unsec. sub. FRN Ser. A, (CME Term SOFR 3 Month + 2.37%), 7.754%, 5/15/67	300,000	268,351
		<b>3,714,711</b>
<b>Total corporate bonds and notes (cost \$35,288,560)</b>		<b>\$33,522,354</b>

<b>U.S. TREASURY OBLIGATIONS (11.3%)*</b>	<b>Principal amount</b>	<b>Value</b>
U.S. Treasury Bonds		
3.625%, 2/15/53	\$350,000	\$323,203
3.00%, 2/15/49	2,080,000	1,692,519
3.00%, 2/15/47	2,010,000	1,645,688
2.75%, 8/15/42 #	4,350,000	3,532,336
1.875%, 2/15/51	1,350,000	856,037

<b>U.S. TREASURY OBLIGATIONS (11.3%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
U.S. Treasury Notes		
4.125%, 11/15/32	\$700,000	\$711,539
2.75%, 8/15/32	2,200,000	2,014,719
2.25%, 11/15/27	2,340,000	2,199,867
1.625%, 5/15/31	1,110,000	952,129
1.625%, 9/30/26	2,420,000	2,268,939
1.625%, 5/15/26	2,330,000	2,198,391
1.625%, 2/15/26	3,090,000	2,928,810
1.50%, 2/15/30	760,000	662,120
1.375%, 11/15/31	980,000	813,630
1.125%, 2/28/25	2,000,000	1,921,016
0.25%, 7/31/25	750,000	702,393
<b>Total U.S. treasury obligations (cost \$28,003,483)</b>		<b>\$25,423,336</b>

<b>U.S. GOVERNMENT AND AGENCY MORTGAGE OBLIGATIONS (8.9%)*</b>	<b>Principal amount</b>	<b>Value</b>
<b>U.S. Government Guaranteed Mortgage Obligations (1.8%)</b>		
Government National Mortgage Association Pass-Through Certificates		
4.50%, 3/20/49	\$414,501	\$408,086
3.50%, with due dates from 11/20/47 to 4/20/51	1,148,467	1,062,856
3.00%, with due dates from 7/20/46 to 11/20/46	2,187,225	2,010,090
2.00%, 1/20/51	816,731	674,094
		<b>4,155,126</b>

<b>U.S. Government Agency Mortgage Obligations (7.1%)</b>	<b>Principal amount</b>	<b>Value</b>
Federal Home Loan Mortgage Corporation Pass-Through Certificates		
5.50%, with due dates from 9/1/53 to 11/1/53 ##	904,708	910,421
4.50%, 8/1/52	938,491	911,035
2.50%, with due dates from 7/1/50 to 2/1/51	171,706	148,473
Federal National Mortgage Association Pass-Through Certificates		
5.50%, with due dates from 7/1/33 to 11/1/38	55,166	56,780
5.50%, 9/1/53 ##	101,603	102,245
5.00%, with due dates from 8/1/33 to 10/1/52	930,893	924,977
4.50%, 2/1/49	508,541	503,834
4.00%, with due dates from 4/1/49 to 5/1/49	639,327	614,633
3.50%, with due dates from 11/1/49 to 12/1/49	669,165	620,565
3.00%, with due dates from 6/1/46 to 8/1/51	1,815,210	1,632,235
2.50%, with due dates from 7/1/50 to 7/1/51	2,355,428	2,018,539
2.50%, 2/1/36	175,222	162,306
2.00%, 10/1/50	2,131,506	1,753,226
Uniform Mortgage-Backed Securities		
6.00%, TBA, 1/1/54	1,000,000	1,015,938
5.50%, TBA, 1/1/54	1,000,000	1,004,922
5.00%, TBA, 1/1/54	1,000,000	990,000
2.50%, TBA, 1/1/54	3,000,000	2,555,156
		<b>15,925,285</b>

<b>Total U.S. government and agency mortgage obligations (cost \$21,288,235)</b>		<b>\$20,080,411</b>
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<b>MORTGAGE-BACKED SECURITIES (0.5%)*</b>	<b>Principal amount</b>	<b>Value</b>
Benchmark Mortgage Trust Ser. 19-B12, Class A5, 3.116%, 8/15/52	\$37,000	\$33,237
Citigroup Commercial Mortgage Trust Ser. 14-GC21, Class C, 4.78%, 5/10/47 W	124,000	117,020
COMM Mortgage Trust FRB Ser. 14-UBS6, Class C, 4.433%, 12/10/47 W	20,000	16,922
CSAIL Commercial Mortgage Trust Ser. 19-C17, Class AS, 3.278%, 9/15/52	215,000	182,418

<b>MORTGAGE-BACKED SECURITIES (0.5%)* cont.</b>	<b>Principal amount</b>	<b>Value</b>
GS Mortgage Securities Trust FRB Ser. 14-GC22, Class C, 4.685%, 6/10/47 <sup>W</sup>	\$107,000	\$66,982
LSTAR Commercial Mortgage Trust 144A FRB Ser. 15-3, Class AS, 3.134%, 4/20/48 <sup>W</sup>	13,827	13,420
Morgan Stanley Bank of America Merrill Lynch Trust Ser. 16-C28, Class A4, 3.544%, 1/15/49	340,000	324,656
Morgan Stanley Capital I Trust Ser. 18-L1, Class A4, 4.407%, 10/15/51 <sup>W</sup>	408,000	394,532
Morgan Stanley Capital I Trust 144A FRB Ser. 12-C4, Class D, 5.164%, 3/15/45 <sup>W</sup>	48,193	43,608
TIAA Real Estate CDO, Ltd. 144A Ser. 03-1A, Class E, 8.00%, 12/28/38 (In default) †	220,229	2
WF-RBS Commercial Mortgage Trust 144A FRB Ser. 11-C3, Class D, 5.855%, 3/15/44 (In default) † <sup>W</sup>	20,645	5,983
<b>Total mortgage-backed securities (cost \$1,504,520)</b>		<b>\$1,198,780</b>

<b>MUNICIPAL BONDS AND NOTES (0.1%)*</b>	<b>Principal amount</b>	<b>Value</b>
CA State G.O. Bonds, (Build America Bonds), 7.50%, 4/1/34	\$30,000	\$36,460
North TX, Tollway Auth. Rev. Bonds, (Build America Bonds), 6.718%, 1/1/49	55,000	68,027
OH State U. Rev. Bonds, (Build America Bonds), 4.91%, 6/1/40	40,000	40,140
<b>Total municipal bonds and notes (cost \$125,137)</b>		<b>\$144,627</b>

<b>PURCHASED OPTIONS OUTSTANDING (–%)* Counterparty</b>	<b>Expiration date/strike price</b>	<b>Notional amount</b>	<b>Contract amount</b>	<b>Value</b>
<b>UBS AG</b>				
BP PLC (Call)	Jun-24/\$45.00	\$243,623	\$6,882	\$1,206
Hertz Global Holdings, Inc. (Call)	Jun-24/25.00	138,229	13,304	827
<b>Total purchased options outstanding (cost \$17,387)</b>				<b>\$2,033</b>

<b>SHORT-TERM INVESTMENTS (8.0%)*</b>	<b>Shares</b>	<b>Value</b>
Putnam Cash Collateral Pool, LLC 5.59% <sup>d</sup>	6,599,250	\$6,599,250
Putnam Short Term Investment Fund Class P5.53% <sup>L</sup>	11,467,134	11,467,134
State Street Institutional U.S. Government Money Market Fund, Premier Class 5.32% <sup>P</sup>	23,000	23,000
<b>Total short-term investments (cost \$18,089,384)</b>		<b>\$18,089,384</b>

**Total investments (cost \$193,125,135) \$238,353,362**

#### Key to holding's abbreviations

<b>ADR</b>	American Depository Receipts: Represents ownership of foreign securities on deposit with a custodian bank.
<b>CME</b>	Chicago Mercantile Exchange
<b>DAC</b>	Designated Activity Company
<b>FRB</b>	Floating Rate Bonds: The rate shown is the current interest rate at the close of the reporting period. Rates may be subject to a cap or floor. For certain securities, the rate may represent a fixed rate currently in place at the close of the reporting period.

<b>FRN</b>	Floating Rate Notes: The rate shown is the current interest rate or yield at the close of the reporting period. Rates may be subject to a cap or floor. For certain securities, the rate may represent a fixed rate currently in place at the close of the reporting period.
<b>GMTN</b>	Global Medium Term Notes
<b>G.O. Bonds</b>	General Obligation Bonds
<b>MTN</b>	Medium Term Notes
<b>REGS</b>	Securities sold under Regulation S may not be offered, sold or delivered within the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act of 1933.
<b>SOFR</b>	Secured Overnight Financing Rate
<b>TBA</b>	To Be Announced Commitments

#### Notes to the fund's portfolio

Unless noted otherwise, the notes to the fund's portfolio are for the close of the fund's reporting period, which ran from January 1, 2023 through December 31, 2023 (the reporting period). Within the following notes to the portfolio, references to "Putnam Management" represent Putnam Investment Management, LLC, the fund's manager, an indirect wholly-owned subsidiary of Franklin Resources, Inc., and references to "ASC 820" represent Accounting Standards Codification 820 *Fair Value Measurements and Disclosures*.

- \* Percentages indicated are based on net assets of \$225,372,600.
- † This security is non-income-producing.
- # This security, in part or in entirety, was pledged and segregated with the broker to cover margin requirements for futures contracts at the close of the reporting period. Collateral at period end totaled \$142,280 and is included in Investments in securities on the Statement of assets and liabilities (Notes 1 and 8).
- ## Forward commitment(s), in part or in entirety (Note 1).
- <sup>d</sup> Affiliated company. See Notes 1 and 5 to the financial statements regarding securities lending. The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
- <sup>L</sup> Affiliated company (Note 5). The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
- <sup>P</sup> This security was pledged, or purchased with cash that was pledged, to the fund for collateral on certain derivative contracts and TBA commitments. The rate quoted in the security description is the annualized 7-day yield of the fund at the close of the reporting period.
- <sup>R</sup> Real Estate Investment Trust.
- <sup>S</sup> Security on loan, in part or in entirety, at the close of the reporting period (Note 1).
- <sup>W</sup> The rate shown represents the weighted average coupon associated with the underlying mortgage pools. Rates may be subject to a cap or floor. Debt obligations are considered secured unless otherwise indicated. 144A after the name of an issuer represents securities exempt from registration under Rule 144A of the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration, normally to qualified institutional buyers. See Note 1 to the financial statements regarding TBA commitments. The dates shown on debt obligations are the original maturity dates.

FORWARD CURRENCY CONTRACTS at 12/31/23 (aggregate face value \$7,638,058)						
Counterparty	Currency	Contract type*	Delivery date	Value	Aggregate face value	Unrealized appreciation/(depreciation)
<b>Bank of America N.A.</b>						
	British Pound	Sell	3/20/24	\$494,624	\$489,051	\$(5,573)
	Canadian Dollar	Sell	1/17/24	16,758	16,174	(584)
<b>Barclays Bank PLC</b>						
	British Pound	Sell	3/20/24	895,015	885,096	(9,919)
	Canadian Dollar	Sell	1/17/24	416,907	402,367	(14,540)
	Euro	Sell	3/20/24	311,053	304,689	(6,364)
<b>Citibank, N.A.</b>						
	Canadian Dollar	Sell	1/17/24	475,031	458,217	(16,814)
	Euro	Sell	3/20/24	455,672	446,301	(9,371)
<b>Goldman Sachs International</b>						
	British Pound	Sell	3/20/24	578,910	572,315	(6,595)
	Euro	Sell	3/20/24	217,261	212,796	(4,465)
<b>HSBC Bank USA, National Association</b>						
	Danish Krone	Sell	3/20/24	357,673	349,767	(7,906)
	Hong Kong Dollar	Sell	2/21/24	317,482	317,056	(426)
<b>JPMorgan Chase Bank N.A.</b>						
	British Pound	Sell	3/20/24	207,082	204,738	(2,344)
	Canadian Dollar	Sell	1/17/24	657,630	634,636	(22,994)
<b>Morgan Stanley &amp; Co. International PLC</b>						
	British Pound	Sell	3/20/24	302,589	299,236	(3,353)
	Canadian Dollar	Buy	1/17/24	383,618	373,917	9,701
<b>State Street Bank and Trust Co.</b>						
	Hong Kong Dollar	Sell	2/21/24	324,957	324,547	(410)
<b>Toronto-Dominion Bank</b>						
	Euro	Sell	3/20/24	276,172	277,916	1,744
<b>UBSAG</b>						
	Canadian Dollar	Sell	1/17/24	365,577	352,826	(12,751)
	Euro	Sell	3/20/24	245,720	240,693	(5,027)
<b>WestPac Banking Corp.</b>						
	Canadian Dollar	Sell	1/17/24	492,996	475,720	(17,276)
<b>Unrealized appreciation</b>						<b>11,445</b>
<b>Unrealized (depreciation)</b>						<b>(146,712)</b>
<b>Total</b>						<b>\$(135,267)</b>

\* The exchange currency for all contracts listed is the United States Dollar.

FUTURES CONTRACTS OUTSTANDING at 12/31/23	Number of contracts	Notional amount	Value	Expiration date	Unrealized appreciation
S&P 500 Index E-Mini (Long)	11	\$2,623,407	\$2,651,000	Mar-24	\$39,049
<b>Unrealized appreciation</b>					<b>39,049</b>
<b>Unrealized (depreciation)</b>					<b>—</b>
<b>Total</b>					<b>\$39,049</b>

WRITTEN OPTIONS OUTSTANDING at 12/31/23 (premiums \$6,836)					
Counterparty	Expiration date/strike price	Notional amount	Contract amount	Value	
<b>UBSAG</b>					
BP PLC (Call)	Jun-24/\$50.00	\$243,623	\$6,882	\$314	
Hertz Global Holdings, Inc. (Call)	Jun-24/30.00	138,229	13,304	359	
<b>Total</b>					<b>\$673</b>

TBASALE COMMITMENTS OUTSTANDING at 12/31/23 (proceeds receivable \$1,014,375)			
	Principal amount	Settlement date	Value
Uniform Mortgage-Backed Securities, 6.00%, 1/1/54	\$1,000,000	1/16/24	\$1,015,938
<b>Total</b>			<b>\$1,015,938</b>

ASC 820 establishes a three-level hierarchy for disclosure of fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of the fund's investments. The three levels are defined as follows:

Level 1: Valuations based on quoted prices for identical securities in active markets.

Level 2: Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

Level 3: Valuations based on inputs that are unobservable and significant to the fair value measurement.

The following is a summary of the inputs used to value the fund's net assets as of the close of the reporting period:

Investments in securities:	Valuation inputs		
	Level 1	Level 2	Level 3
Common stocks*:			
Basic materials	\$4,088,320	\$478,277	\$—
Capital goods	6,539,066	—	—
Communication services	2,446,754	—	—
Conglomerates	288,699	—	—
Consumer cyclical	23,277,715	—	—
Consumer staples	7,735,777	—	—
Energy	4,607,647	1,162,418	—
Financials	13,197,498	2,917,060	—
Health care	18,384,745	—	—
Technology	48,077,450	—	—
Transportation	3,005,202	—	—
Utilities and power	3,685,809	—	—
<b>Total common stocks</b>	<b>135,334,682</b>	<b>4,557,755</b>	<b>—</b>
Corporate bonds and notes	—	33,522,354	—
Mortgage-backed securities	—	1,198,780	—
Municipal bonds and notes	—	144,627	—
Purchased options outstanding	—	2,033	—
U.S. government and agency mortgage obligations	—	20,080,411	—
U.S. treasury obligations	—	25,423,336	—
Short-term investments	23,000	18,066,384	—
<b>Totals by level</b>	<b>\$135,357,682</b>	<b>\$102,995,680</b>	<b>\$—</b>

Other financial instruments:	Valuation inputs		
	Level 1	Level 2	Level 3
Forward currency contracts	\$—	\$(135,267)	\$—
Futures contracts	39,049	—	—
Written options outstanding	—	(673)	—
TBA sale commitments	—	(1,015,938)	—
<b>Totals by level</b>	<b>\$39,049</b>	<b>\$(1,151,878)</b>	<b>\$—</b>

\* Common stock classifications are presented at the sector level, which may differ from the fund's portfolio presentation.

# Statement of assets and liabilities

12/31/23

## Assets

Investment in securities, at value, including \$6,397,649 of securities on loan (Notes 1 and 8):	
Unaffiliated issuers (identified cost \$175,058,751)	\$220,286,978
Affiliated issuers (identified cost \$18,066,384) (Note 5)	18,066,384
Dividends, interest and other receivables	828,014
Receivable for shares of the fund sold	3,768
Receivable for investments sold	441,216
Receivable for sales of TBA securities (Note 1)	1,016,875
Unrealized appreciation on forward currency contracts (Note 1)	11,445
<b>Total assets</b>	<b>240,654,680</b>

## Liabilities

Payable for investments purchased	330,341
Payable for purchases of delayed delivery securities (Note 1)	1,014,120
Payable for purchases of TBA securities (Note 1)	5,381,563
Payable for shares of the fund repurchased	431,028
Payable for compensation of Manager (Note 2)	97,301
Payable for custodian fees (Note 2)	9,737
Payable for investor servicing fees (Note 2)	25,320
Payable for Trustee compensation and expenses (Note 2)	63,336
Payable for administrative services (Note 2)	3,144
Payable for distribution fees (Note 2)	33,481
Payable for variation margin on futures contracts (Note 1)	6,775
Unrealized depreciation on forward currency contracts (Note 1)	146,712
Written options outstanding, at value (premiums \$6,836) (Note 1)	673
TBA sale commitments, at value (proceeds receivable \$1,014,375) (Note 1)	1,015,938
Collateral on securities loaned, at value (Note 1)	6,599,250
Collateral on certain derivative contracts and TBA commitments, at value (Notes 1 and 8)	23,000
Other accrued expenses	100,361
<b>Total liabilities</b>	<b>15,282,080</b>
<b>Net assets</b>	<b>\$225,372,600</b>

## Represented by

Paid-in capital (Unlimited shares authorized) (Notes 1 and 4)	\$179,602,543
Total distributable earnings (Note 1)	45,770,057
<b>Total — Representing net assets applicable to capital shares outstanding</b>	<b>\$225,372,600</b>

## Computation of net asset value Class IA

Net assets	\$64,912,188
Number of shares outstanding	4,721,282
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$13.75

## Computation of net asset value Class IB

Net assets	\$160,460,412
Number of shares outstanding	11,744,939
Net asset value, offering price and redemption price per share (net assets divided by number of shares outstanding)	\$13.66

The accompanying notes are an integral part of these financial statements.

# Statement of operations

Year ended 12/31/23

## Investment income

Interest (including interest income of \$266,494 from investments in affiliated issuers) (Note 5)	\$2,916,838
Dividends (net of foreign tax of \$12,859)	1,934,056
Securities lending (net of expenses) (Notes 1 and 5)	9,640
<b>Total investment income</b>	<b>4,860,534</b>

## Expenses

Compensation of Manager (Note 2)	1,095,236
Investor servicing fees (Note 2)	147,430
Custodian fees (Note 2)	29,792
Trustee compensation and expenses (Note 2)	9,220
Distribution fees (Note 2)	372,961
Administrative services (Note 2)	6,891
Other	129,012
<b>Total expenses</b>	<b>1,790,542</b>
Expense reduction (Note 2)	(453)
<b>Net expenses</b>	<b>1,790,089</b>
<b>Net investment income</b>	<b>3,070,445</b>

## Realized and unrealized gain (loss)

### Net realized gain (loss) on:

Securities from unaffiliated issuers (Notes 1 and 3)	1,198,904
Foreign currency transactions (Note 1)	510
Forward currency contracts (Note 1)	(41,013)
Futures contracts (Note 1)	93,108
Written options (Note 1)	3,405
<b>Total net realized gain</b>	<b>1,254,914</b>

### Change in net unrealized appreciation (depreciation) on:

Securities from unaffiliated issuers and TBA sale commitments	34,226,942
Assets and liabilities in foreign currencies	94
Forward currency contracts	(94,884)
Futures contracts	75,826
Written options	6,163
<b>Total change in net unrealized appreciation</b>	<b>34,214,141</b>

**Net gain on investments** **35,469,055**

**Net increase in net assets resulting from operations** **\$38,539,500**

The accompanying notes are an integral part of these financial statements.

## Statement of changes in net assets

	Year ended 12/31/23	Year ended 12/31/22
<b>Increase (decrease) in net assets</b>		
<b>Operations:</b>		
Net investment income	\$3,070,445	\$2,318,859
Net realized gain (loss) on investments and foreign currency transactions	1,254,914	(2,292,168)
Change in net unrealized appreciation (depreciation) of investments and assets and liabilities in foreign currencies	34,214,141	(39,824,262)
<b>Net increase (decrease) in net assets resulting from operations</b>	<b>38,539,500</b>	<b>(39,797,571)</b>
Distributions to shareholders (Note 1):		
From ordinary income		
Net investment income		
Class IA	(919,393)	(794,852)
Class IB	(1,854,708)	(1,453,152)
Net realized short-term gain on investments		
Class IA	—	(1,508,149)
Class IB	—	(3,533,551)
Net realized long-term gain on investments		
Class IA	—	(3,529,793)
Class IB	—	(8,270,204)
Increase (decrease) from capital share transactions (Note 4)	(10,839,975)	6,869,282
<b>Total increase (decrease) in net assets</b>	<b>24,925,424</b>	<b>(52,017,990)</b>
<b>Net assets:</b>		
Beginning of year	200,447,176	252,465,166
<b>End of year</b>	<b>\$225,372,600</b>	<b>\$200,447,176</b>

The accompanying notes are an integral part of these financial statements.

## Financial highlights

(For a common share outstanding throughout the period)

Period ended	INVESTMENT OPERATIONS:				LESS DISTRIBUTIONS:			RATIOS AND SUPPLEMENTAL DATA:					
	Net asset value, beginning of period	Net investment income (loss) <sup>a</sup>	Net realized and unrealized gain (loss) on investments	Total from investment operations	From net investment income	From net realized gain on investments	Total distributions	Net asset value, end of period	Total return at net asset value (%) <sup>b,c</sup>	Net assets, end of period (in thousands)	Ratio of expenses to average net assets (%) <sup>b,d</sup>	Ratio of net investment income (loss) to average net assets (%)	Portfolio turnover (%) <sup>e</sup>
<b>Class IA</b>													
12/31/23	\$11.61	.20	2.13	2.33	(.19)	—	(.19)	\$13.75	20.26	\$64,912	.67	1.63	47
12/31/22	15.02	.15	(2.39)	(2.24)	(.16)	(1.01)	(1.17)	11.61	(15.82)	59,556	.68 <sup>f</sup>	1.25	69
12/31/21	14.13	.13	1.76	1.89	(.15)	(.85)	(1.00)	15.02	14.28	77,232	.64	.91	97
12/31/20	13.26	.15	1.64	1.79	(.18)	(.74)	(.92)	14.13	15.61	69,648	.68	1.20	113
12/31/19	11.38	.20	2.46	2.66	(.20)	(.58)	(.78)	13.26	24.35	66,059	.69	1.62	128
<b>Class IB</b>													
12/31/23	\$11.54	.17	2.10	2.27	(.15)	—	(.15)	\$13.66	19.90	\$160,460	.92	1.39	47
12/31/22	14.93	.12	(2.38)	(2.26)	(.12)	(1.01)	(1.13)	11.54	(15.99)	140,892	.93 <sup>f</sup>	1.00	69
12/31/21	14.05	.09	1.76	1.85	(.12)	(.85)	(.97)	14.93	14.04	175,233	.89	.66	97
12/31/20	13.19	.12	1.63	1.75	(.15)	(.74)	(.89)	14.05	15.32	155,202	.93	.93	113
12/31/19	11.33	.17	2.45	2.62	(.18)	(.58)	(.76)	13.19	24.00	123,280	.94	1.36	128

<sup>a</sup> Per share net investment income (loss) has been determined on the basis of the weighted average number of shares outstanding during the period.

<sup>b</sup> The charges and expenses at the insurance company separate account level are not reflected.

<sup>c</sup> Total return assumes dividend reinvestment.

<sup>d</sup> Includes amounts paid through expense offset arrangements and/or brokerage/service arrangements, if any (Note 2). Also excludes acquired fund fees and expenses, if any.

<sup>e</sup> Portfolio turnover includes TBA purchase and sale commitments.

<sup>f</sup> Includes one-time proxy cost of 0.01%.

The accompanying notes are an integral part of these financial statements.

## Notes to financial statements 12/31/23

Unless otherwise noted, the “reporting period” represents the period from January 1, 2023 through December 31, 2023. The following table defines commonly used references within the Notes to financial statements:

References to	Represent
Franklin Templeton	Franklin Resources, Inc.
JPMorgan	JPMorgan Chase Bank, N.A.
OTC	over-the-counter
PIL	Putnam Investments Limited, an affiliate of Putnam Management
Putnam Management	Putnam Investment Management, LLC, the fund’s manager, an indirect wholly-owned subsidiary of Franklin Templeton
SEC	Securities and Exchange Commission
State Street	State Street Bank and Trust Company

Putnam VT George Putnam Balanced Fund (the fund) is a diversified series of Putnam Variable Trust (the Trust), a Massachusetts business trust registered under the Investment Company Act of 1940, as amended, as an open-end management investment company. The goal of the fund is to seek to provide a balanced investment composed of a well-diversified portfolio of stocks and bonds which produce both capital growth and current income. The fund invests mainly in a combination of bonds and common stocks (growth or value stocks or both) of large U.S. companies, with a greater focus on common stocks. For example, the fund may purchase stocks of companies with stock prices that reflect a value lower than that which Putnam Management places on the company. Putnam Management may also consider other factors that Putnam Management believes will cause the stock price to rise. The fund buys bonds of governments and private companies that are mostly investment-grade in quality with intermediate- to long-term maturities (three years or longer). Putnam Management may consider, among other factors, a company’s valuation, financial strength, growth potential, competitive position in its industry, projected future earnings, cash flows and dividends when deciding whether to buy or sell equity investments, and, among other factors, credit, interest rate and prepayment risks, as well as general market conditions, when deciding whether to buy or sell fixed-income investments. The fund may also use derivatives, such as futures, options, warrants and swap contracts, for both hedging and non-hedging purposes.

The fund offers class IA and class IB shares of beneficial interest. Class IA shares are offered at net asset value and are not subject to a distribution fee. Class IB shares are offered at net asset value and pay an ongoing distribution fee, which is identified in Note 2.

In the normal course of business, the fund enters into contracts that may include agreements to indemnify another party under given circumstances. The fund’s maximum exposure under these arrangements is unknown as this would involve future claims that may be, but have not yet been, made against the fund. However, the fund’s management team expects the risk of material loss to be remote.

The fund has entered into contractual arrangements with an investment adviser, administrator, distributor, shareholder servicing agent and custodian, who each provide services to the fund. Unless expressly stated otherwise, shareholders are not parties to, or intended beneficiaries of these contractual arrangements, and these contractual arrangements are not intended to create any shareholder right to enforce them against the service providers or to seek any remedy under them against the service providers, either directly or on behalf of the fund.

Under the Trust’s Amended and Restated Agreement and Declaration of Trust, any claims asserted by a shareholder against or on behalf of the Trust (or its series), including claims against Trustees and Officers, must be brought in state and federal courts located within the Commonwealth of Massachusetts.

### Note 1 — Significant accounting policies

The fund follows the accounting and reporting guidance in Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 946, *Financial Services – Investment Companies* (ASC 946) and applies the specialized accounting and reporting guidance in U.S. Generally Accepted Accounting Principles (U.S. GAAP), including, but not limited to, ASC 946. The following is a summary of significant accounting policies consistently followed by the fund in the preparation of its financial statements. The preparation of financial statements is in conformity with accounting principles generally accepted in the United States of America and requires management to make estimates and assumptions that affect the

reported amounts of assets and liabilities in the financial statements and the reported amounts of increases and decreases in net assets from operations. Actual results could differ from those estimates. Subsequent events after the Statement of assets and liabilities date through the date that the financial statements were issued have been evaluated in the preparation of the financial statements.

Investment income, realized and unrealized gains and losses and expenses of the fund are borne pro-rata based on the relative net assets of each class to the total net assets of the fund, except that each class bears expenses unique to that class (including the distribution fees applicable to such classes). Each class votes as a class only with respect to its own distribution plan or other matters on which a class vote is required by law or determined by the Trustees. If the fund were liquidated, shares of each class would receive their pro-rata share of the net assets of the fund. In addition, the Trustees declare separate dividends on each class of shares.

**Security valuation** Portfolio securities and other investments are valued using policies and procedures adopted by the Board of Trustees. The Trustees have formed a Pricing Committee to oversee the implementation of these procedures and have delegated responsibility for valuing the fund’s assets in accordance with these procedures to Putnam Management. Putnam Management has established an internal Valuation Committee that is responsible for making fair value determinations, evaluating the effectiveness of the pricing policies of the fund and reporting to the Pricing Committee.

Investments for which market quotations are readily available are valued at the last reported sales price on their principal exchange, or official closing price for certain markets, and are classified as Level 1 securities under Accounting Standards Codification 820 *Fair Value Measurements and Disclosures* (ASC 820). If no sales are reported, as in the case of some securities that are traded OTC, a security is valued at its last reported bid price and is generally categorized as a Level 2 security.

Investments in open-end investment companies (excluding exchange-traded funds), if any, which can be classified as Level 1 or Level 2 securities, are valued based on their net asset value. The net asset value of such investment companies equals the total value of their assets less their liabilities and divided by the number of their outstanding shares.

Market quotations are not considered to be readily available for certain debt obligations (including short-term investments with remaining maturities of 60 days or less) and other investments; such investments are valued on the basis of valuations furnished by an independent pricing service approved by the Trustees or dealers selected by Putnam Management. Such services or dealers determine valuations for normal institutional-size trading units of such securities using methods based on market transactions for comparable securities and various relationships, generally recognized by institutional traders, between securities (which consider such factors as security prices, yields, maturities and ratings). These securities will generally be categorized as Level 2.

Many securities markets and exchanges outside the U.S. close prior to the scheduled close of the New York Stock Exchange and therefore the closing prices for securities in such markets or on such exchanges may not fully reflect events that occur after such close but before the scheduled close of the New York Stock Exchange. Accordingly, on certain days, the fund will fair value certain foreign equity securities taking into account multiple factors including movements in the U.S. securities markets, currency valuations and comparisons to the valuation of American Depository Receipts, exchange-traded funds and futures contracts. The foreign equity securities, which would generally be classified as Level 1 securities, will be transferred to Level 2 of the fair value hierarchy when they are valued at fair value. The number of days on which fair value prices will be used will depend on market activity and it is possible that fair value prices will be used by the fund to a significant extent. At the close of the reporting period, fair value pricing was used for certain foreign securities in the portfolio. Securities quoted in foreign currencies, if any, are translated into U.S. dollars at the current exchange rate.

To the extent a pricing service or dealer is unable to value a security or provides a valuation that Putnam Management does not believe accurately reflects the security’s fair value, the security will be valued at fair value by Putnam Management, which has been designated as valuation designee pursuant to Rule 2a-5 under the Investment Company Act of 1940, in accordance with policies and procedures approved by the Trustees. Certain investments, including certain restricted and illiquid securities and derivatives, are also valued at fair value following procedures approved by the Trustees. These valuations consider such factors as

significant market or specific security events such as interest rate or credit quality changes, various relationships with other securities, discount rates, U.S. Treasury, U.S. swap and credit yields, index levels, convexity exposures, recovery rates, sales and other multiples and resale restrictions. These securities are classified as Level 2 or as Level 3 depending on the priority of the significant inputs.

To assess the continuing appropriateness of fair valuations, the Valuation Committee reviews and affirms the reasonableness of such valuations on a regular basis after considering all relevant information that is reasonably available. Such valuations and procedures are reviewed periodically by the Trustees. Certain securities may be valued on the basis of a price provided by a single source. The fair value of securities is generally determined as the amount that the fund could reasonably expect to realize from an orderly disposition of such securities over a reasonable period of time. By its nature, a fair value price is a good faith estimate of the value of a security in a current sale and does not reflect an actual market price, which may be different by a material amount.

**Security transactions and related investment income** Security transactions are recorded on the trade date (the date the order to buy or sell is executed). Gains or losses on securities sold are determined on the identified cost basis.

Interest income, net of any applicable withholding taxes, if any, is recorded on the accrual basis. Amortization and accretion of premiums and discounts on debt securities, if any, is recorded on the accrual basis.

Dividend income, net of any applicable withholding taxes, is recognized on the ex-dividend date except that certain dividends from foreign securities, if any, are recognized as soon as the fund is informed of the ex-dividend date. Non-cash dividends, if any, are recorded at the fair value of the securities received. Dividends representing a return of capital or capital gains, if any, are reflected as a reduction of cost and/or as a realized gain.

Securities purchased or sold on a forward commitment or delayed delivery basis may be settled at a future date beyond customary settlement time; interest income is accrued based on the terms of the securities. Losses may arise due to changes in the fair value of the underlying securities or if the counterparty does not perform under the contract.

**Foreign currency translation** The accounting records of the fund are maintained in U.S. dollars. The fair value of foreign securities, currency holdings, and other assets and liabilities is recorded in the books and records of the fund after translation to U.S. dollars based on the exchange rates on that day. The cost of each security is determined using historical exchange rates. Income and withholding taxes are translated at prevailing exchange rates when earned or incurred. The fund does not isolate that portion of realized or unrealized gains or losses resulting from changes in the foreign exchange rate on investments from fluctuations arising from changes in the market prices of the securities. Such gains and losses are included with the net realized and unrealized gain or loss on investments. Net realized gains and losses on foreign currency transactions represent net realized exchange gains or losses on disposition of foreign currencies, currency gains and losses realized between the trade and settlement dates on securities transactions and the difference between the amount of investment income and foreign withholding taxes recorded on the fund's books and the U.S. dollar equivalent amounts actually received or paid. Net unrealized appreciation and depreciation of assets and liabilities in foreign currencies arise from changes in the value of assets and liabilities other than investments at the period end, resulting from changes in the exchange rate.

**Options contracts** The fund uses options contracts to manage downside risks.

The potential risk to the fund is that the change in value of options contracts may not correspond to the change in value of the hedged instruments. In addition, losses may arise from changes in the value of the underlying instruments if there is an illiquid secondary market for the contracts, if interest or exchange rates move unexpectedly or if the counterparty to the contract is unable to perform. Realized gains and losses on purchased options are included in realized gains and losses on investment securities. If a written call option is exercised, the premium originally received is recorded as an addition to sales proceeds. If a written put option is exercised, the premium originally received is recorded as a reduction to the cost of investments.

Exchange-traded options are valued at the last sale price or, if no sales are reported, the last bid price for purchased options and the last ask price for written options. OTC traded options are valued using prices supplied by dealers.

Options on swaps are similar to options on securities except that the premium paid or received is to buy or grant the right to enter into a previously agreed upon interest rate or credit default contract. Forward premium swap option contracts include premiums that have extended settlement dates. The delayed settlement

of the premiums is factored into the daily valuation of the option contracts. In the case of interest rate cap and floor contracts, in return for a premium, ongoing payments between two parties are based on interest rates exceeding a specified rate, in the case of a cap contract, or falling below a specified rate in the case of a floor contract.

Written option contracts outstanding at period end, if any, are listed after the fund's portfolio.

**Futures contracts** The fund uses futures contracts to equitize cash.

The potential risk to the fund is that the change in value of futures contracts may not correspond to the change in value of the hedged instruments. In addition, losses may arise from changes in the value of the underlying instruments, if there is an illiquid secondary market for the contracts, if interest or exchange rates move unexpectedly or if the counterparty to the contract is unable to perform. With futures, there is minimal counterparty credit risk to the fund since futures are exchange traded and the exchange's clearinghouse, as counterparty to all exchange traded futures, guarantees the futures against default. Risks may exceed amounts recognized on the Statement of assets and liabilities. When the contract is closed, the fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed.

Futures contracts are valued at the quoted daily settlement prices established by the exchange on which they trade. The fund and the broker agree to exchange an amount of cash equal to the daily fluctuation in the value of the futures contract. Such receipts or payments are known as "variation margin."

Futures contracts outstanding at period end, if any, are listed after the fund's portfolio.

**Forward currency contracts** The fund buys and sells forward currency contracts, which are agreements between two parties to buy and sell currencies at a set price on a future date. These contracts are used to hedge foreign exchange risk.

The U.S. dollar value of forward currency contracts is determined using current forward currency exchange rates supplied by a quotation service. The fair value of the contract will fluctuate with changes in currency exchange rates. The contract is marked to market daily and the change in fair value is recorded as an unrealized gain or loss. The fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed when the contract matures or by delivery of the currency. The fund could be exposed to risk if the value of the currency changes unfavorably, if the counterparties to the contracts are unable to meet the terms of their contracts or if the fund is unable to enter into a closing position. Risks may exceed amounts recognized on the Statement of assets and liabilities.

Forward currency contracts outstanding at period end, if any, are listed after the fund's portfolio.

**TBA commitments** The fund may enter into TBA (to be announced) commitments to purchase securities for a fixed unit price at a future date beyond customary settlement time. Although the unit price and par amount have been established, the actual securities have not been specified. However, it is anticipated that the amount of the commitments will not significantly differ from the principal amount. The fund holds, and maintains until settlement date, cash or high-grade debt obligations in an amount sufficient to meet the purchase price, or the fund may enter into offsetting contracts for the forward sale of other securities it owns. Income on the securities will not be earned until settlement date.

The fund may also enter into TBA sale commitments to hedge its portfolio positions, to sell mortgage-backed securities it owns under delayed delivery arrangements or to take a short position in mortgage-backed securities. Proceeds of TBA sale commitments are not received until the contractual settlement date. During the time a TBA sale commitment is outstanding, either equivalent deliverable securities or an offsetting TBA purchase commitment deliverable on or before the sale commitment date are held as "cover" for the transaction, or other liquid assets in an amount equal to the notional value of the TBA sale commitment are segregated. If the TBA sale commitment is closed through the acquisition of an offsetting TBA purchase commitment, the fund realizes a gain or loss. If the fund delivers securities under the commitment, the fund realizes a gain or a loss from the sale of the securities based upon the unit price established at the date the commitment was entered into.

TBA commitments, which are accounted for as purchase and sale transactions, may be considered securities themselves, and involve a risk of loss due to changes in the value of the security prior to the settlement date as well as the risk that the counterparty to the transaction will not perform its obligations. Counterparty risk is mitigated by having a master agreement between the fund and the counterparty.

Unsettled TBA commitments are valued at their fair value according to the procedures described under "Security valuation" above. The contract is marked to market daily and the change in fair value is recorded by the fund as an unrealized gain or loss. Based on market circumstances, Putnam Management will determine whether to take delivery of the underlying securities or to dispose of the TBA commitments prior to settlement.

TBA purchase commitments outstanding at period end, if any, are listed within the fund's portfolio and TBA sale commitments outstanding at period end, if any, are listed after the fund's portfolio.

**Master agreements** The fund is a party to ISDA (International Swaps and Derivatives Association, Inc.) Master Agreements that govern OTC derivative and foreign exchange contracts and Master Securities Forward Transaction Agreements that govern transactions involving mortgage-backed and other asset-backed securities that may result in delayed delivery (Master Agreements) with certain counterparties entered into from time to time. The Master Agreements may contain provisions regarding, among other things, the parties' general obligations, representations, agreements, collateral requirements, events of default and early termination. With respect to certain counterparties, in accordance with the terms of the Master Agreements, collateral pledged to the fund is held in a segregated account by the fund's custodian and, with respect to those amounts which can be sold or repledged, are presented in the fund's portfolio.

Collateral pledged by the fund is segregated by the fund's custodian and identified in the fund's portfolio. Collateral can be in the form of cash or debt securities issued by the U.S. Government or related agencies or other securities as agreed to by the fund and the applicable counterparty. Collateral requirements are determined based on the fund's net position with each counterparty.

With respect to ISDA Master Agreements, termination events applicable to the fund may occur upon a decline in the fund's net assets below a specified threshold over a certain period of time. Termination events applicable to counterparties may occur upon a decline in the counterparty's long-term or short-term credit ratings below a specified level. In each case, upon occurrence, the other party may elect to terminate early and cause settlement of all derivative and foreign exchange contracts outstanding, including the payment of any losses and costs resulting from such early termination, as reasonably determined by the terminating party. Any decision by one or more of the fund's counterparties to elect early termination could impact the fund's future derivative activity.

At the close of the reporting period, the fund had a net liability position of \$141,999 on open derivative contracts subject to the Master Agreements. There was no collateral pledged by the fund at period end for these agreements.

**Securities lending** The fund may lend securities, through its agent, to qualified borrowers in order to earn additional income. The loans are collateralized by cash in an amount at least equal to the fair value of the securities loaned. The fair value of securities loaned is determined daily and any additional required collateral is allocated to the fund on the next business day. The remaining maturities of the securities lending transactions are considered overnight and continuous. The risk of borrower default will be borne by the fund's agent; the fund will bear the risk of loss with respect to the investment of the cash collateral. Income from securities lending, if any, is net of expenses and is included in investment income on the Statement of operations. Cash collateral is invested in Putnam Cash Collateral Pool, LLC, a limited liability company managed by an affiliate of Putnam Management. Investments in Putnam Cash Collateral Pool, LLC are valued at its closing net asset value each business day. There are no management fees charged to Putnam Cash Collateral Pool, LLC. At the close of the reporting period, the fund received cash collateral of \$6,599,250 and the value of securities loaned amounted to \$6,397,456.

**Interfund lending** The fund, along with other Putnam funds, may participate in an interfund lending program pursuant to an exemptive order issued by the SEC. This program allows the fund to borrow from or lend to other Putnam funds that permit such transactions. Interfund lending transactions are subject to each fund's investment policies and borrowing and lending limits. Interest earned or paid on the interfund lending transaction will be based on the average of certain current market rates. During the reporting period, the fund did not utilize the program.

**Lines of credit** The fund participates, along with other Putnam funds, in a \$320 million syndicated unsecured committed line of credit, provided by State Street (\$160 million) and JPMorgan (\$160 million), and a \$235.5 million unsecured uncommitted line of credit, provided by State Street. Borrowings may be made for temporary or emergency purposes, including the funding of shareholder redemption requests and trade settlements. Interest is charged to the fund based on the fund's borrowing at a rate equal to 1.25% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the committed

line of credit and 1.30% plus the higher of (1) the Federal Funds rate and (2) the Overnight Bank Funding Rate for the uncommitted line of credit. A closing fee equal to 0.04% of the committed line of credit and 0.04% of the uncommitted line of credit has been paid by the participating funds and a \$75,000 fee has been paid by the participating funds to State Street as agent of the syndicated committed line of credit. In addition, a commitment fee of 0.21% per annum on any unutilized portion of the committed line of credit is allocated to the participating funds based on their relative net assets and paid quarterly. During the reporting period, the fund had no borrowings against these arrangements.

**Federal taxes** It is the policy of the fund to distribute all of its taxable income within the prescribed time period and otherwise comply with the provisions of the Internal Revenue Code of 1986, as amended (the Code), applicable to regulated investment companies.

The fund is subject to the provisions of Accounting Standards Codification 740 *Income Taxes* (ASC 740). ASC 740 sets forth a minimum threshold for financial statement recognition of the benefit of a tax position taken or expected to be taken in a tax return. The fund did not have a liability to record for any unrecognized tax benefits in the accompanying financial statements. No provision has been made for federal taxes on income, capital gains or unrealized appreciation on securities held nor for excise tax on income and capital gains. Each of the fund's federal tax returns for the prior three fiscal years remains subject to examination by the Internal Revenue Service.

The fund may also be subject to taxes imposed by governments of countries in which it invests. Such taxes are generally based on either income or gains earned or repatriated. The fund accrues and applies such taxes to net investment income, net realized gains and net unrealized gains as income and/or capital gains are earned. In some cases, the fund may be entitled to reclaim all or a portion of such taxes, and such reclaim amounts, if any, are reflected as an asset on the fund's books. In many cases, however, the fund may not receive such amounts for an extended period of time, depending on the country of investment.

Under the Regulated Investment Company Modernization Act of 2010, the fund will be permitted to carry forward capital losses incurred for an unlimited period and the carry forwards will retain their character as either short-term or long-term capital losses. At December 31, 2023, the fund had the following capital loss carryovers available, to the extent allowed by the Code, to offset future net capital gain, if any:

Loss carryover		
Short-term	Long-term	Total
\$506,922	\$318,942	\$825,864

**Distributions to shareholders** Distributions to shareholders from net investment income, if any, are recorded by the fund on the ex-dividend date. Distributions from capital gains, if any, are recorded on the ex-dividend date and paid at least annually. The amount and character of income and gains to be distributed are determined in accordance with income tax regulations, which may differ from generally accepted accounting principles. These differences include temporary and/or permanent differences from losses on wash sale transactions, from foreign currency gains and losses and from interest-only securities. Reclassifications are made to the fund's capital accounts to reflect income and gains available for distribution (or available capital loss carryovers) under income tax regulations. At the close of the reporting period, the fund reclassified \$38,372 to decrease undistributed net investment income and \$38,372 to decrease accumulated net realized loss.

Tax cost of investments includes adjustments to net unrealized appreciation (depreciation) which may not necessarily be final tax cost basis adjustments, but closely approximate the tax basis unrealized gains and losses that may be realized and distributed to shareholders. The tax basis components of distributable earnings and the federal tax cost as of the close of the reporting period were as follows:

Unrealized appreciation	\$53,996,110
Unrealized depreciation	(10,197,659)
Net unrealized appreciation	43,798,451
Undistributed ordinary income	2,797,802
Capital loss carryforward	(825,864)
Cost for federal income tax purposes	\$193,442,082

**Expenses of the Trust** Expenses directly charged or attributable to any fund will be paid from the assets of that fund. Generally, expenses of the Trust will be allocated among and charged to the assets of each fund on a basis that the Trustees deem fair and equitable, which may be based on the relative assets of each fund or the nature of the services performed and relative applicability to each fund.

**Beneficial interest** At the close of the reporting period, insurance companies or their separate accounts were record owners of all but a de minimis number of the shares of the fund. Approximately 44.0% of the fund is owned by accounts of one insurance company.

**Note 2 — Management fee, administrative services and other transactions**

The fund pays Putnam Management a management fee (based on the fund's average net assets and computed and paid monthly) at annual rates that may vary based on the average of the aggregate net assets of all open-end mutual funds sponsored by Putnam Management (excluding net assets of funds that are invested in, or that are invested in by, other Putnam funds to the extent necessary to avoid "double counting" of those assets). Such annual rates may vary as follows:

0.680%	of the first \$5 billion,
0.630%	of the next \$5 billion,
0.580%	of the next \$10 billion,
0.530%	of the next \$10 billion,
0.480%	of the next \$50 billion,
0.460%	of the next \$50 billion,
0.450%	of the next \$100 billion and
0.445%	of any excess thereafter.

For the reporting period, the management fee represented an effective rate (excluding the impact from any expense waivers in effect) of 0.520% of the fund's average net assets.

Putnam Management has contractually agreed, through April 30, 2025, to waive fees and/or reimburse the fund's expenses to the extent necessary to limit the cumulative expenses of the fund, exclusive of brokerage, interest, taxes, investment-related expenses, extraordinary expenses, acquired fund fees and expenses and payments under the fund's investor servicing contract, investment management contract and distribution plan, on a fiscal year-to-date basis to an annual rate of 0.20% of the fund's average net assets over such fiscal year-to-date period. During the reporting period, the fund's expenses were not reduced as a result of this limit.

PIL is authorized by the Trustees to manage a separate portion of the assets of the fund as determined by Putnam Management from time to time. PIL did not manage any portion of the assets of the fund during the reporting period. If Putnam Management were to engage the services of PIL, Putnam Management would pay a quarterly sub-management fee to PIL for its services at an annual rate of 0.25% of the average net assets of the equity and asset allocation portion of the fund managed by PIL and 0.20% of the average net assets of the fixed-income portion of the fund managed by PIL.

On January 1, 2024, a subsidiary of Franklin Templeton acquired Putnam U.S. Holdings I, LLC ("Putnam Holdings"), the parent company of Putnam Management and PIL, in a stock and cash transaction (the "Transaction"). As a result of the Transaction, Putnam Management (the investment manager to the fund and a wholly-owned subsidiary of Putnam Holdings) and PIL (sub-adviser to the fund and an indirect, wholly-owned subsidiary of Putnam Holdings) became indirect, wholly-owned subsidiaries of Franklin Templeton. The Transaction also resulted in the automatic termination of the investment management contract between the fund and Putnam Management and the sub-management contract for the fund between Putnam Management and PIL that were in place for the fund before the Transaction. However, Putnam Management and PIL continue to provide uninterrupted services with respect to the fund pursuant to new investment management and sub-management contracts that were approved by fund shareholders at a shareholder meeting held in connection with the Transaction and that took effect on January 1, 2024. The terms of the new investment management and sub-management contracts are substantially similar to those of the previous investment management and sub-management contracts, and the fee rates payable under the new investment management and sub-management contracts are the same as the fee rates under the previous investment management and sub-management contracts.

The fund reimburses Putnam Management an allocated amount for the compensation and related expenses of certain officers of the fund and their staff who provide administrative services to the fund. The aggregate amount of all such reimbursements is determined annually by the Trustees.

Custodial functions for the fund's assets are provided by State Street. Custody fees are based on the fund's asset level, the number of its security holdings and transaction volumes.

Putnam Investor Services, Inc., an affiliate of Putnam Management, provides investor servicing agent functions to the fund. Putnam Investor Services, Inc. was paid a monthly fee for investor servicing at an annual rate of 0.07% of the fund's average daily net assets. During the reporting period, the expenses for each class of shares related to investor servicing fees were as follows:

Class IA	\$43,010
Class IB	104,420
Total	\$147,430

The fund has entered into expense offset arrangements with Putnam Investor Services, Inc. and State Street whereby Putnam Investor Services, Inc.'s and State Street's fees are reduced by credits allowed on cash balances. For the reporting period, the fund's expenses were reduced by \$453 under the expense offset arrangements.

Each Independent Trustee of the fund receives an annual Trustee fee, of which \$181, as a quarterly retainer, has been allocated to the fund, and an additional fee for each Trustees meeting attended. Trustees also are reimbursed for expenses they incur relating to their services as Trustees.

The fund has adopted a Trustee Fee Deferral Plan (the Deferral Plan) which allows the Trustees to defer the receipt of all or a portion of Trustees fees payable from July 1, 1995 through December 31, 2023. The deferred fees remain invested in certain Putnam funds until distribution in accordance with the Deferral Plan.

The fund has adopted an unfunded noncontributory defined benefit pension plan (the Pension Plan) covering all Trustees of the fund who have served as a Trustee for at least five years and were first elected prior to 2004. Benefits under the Pension Plan are equal to 50% of the Trustee's average annual attendance and retainer fees for the three years ended December 31, 2005. The retirement benefit is payable during a Trustee's lifetime, beginning the year following retirement, for the number of years of service through December 31, 2006. Pension expense for the fund is included in Trustee compensation and expenses in the Statement of operations. Accrued pension liability is included in Payable for Trustee compensation and expenses in the Statement of assets and liabilities. The Trustees have terminated the Pension Plan with respect to any Trustee first elected after 2003.

The fund has adopted a distribution plan (the Plan) with respect to its class IB shares pursuant to Rule 12b-1 under the Investment Company Act of 1940. The purpose of the Plan is to compensate Putnam Retail Management Limited Partnership, an indirect wholly-owned subsidiary of Franklin Templeton, for services provided and expenses incurred in distributing shares of the fund. The Plan provides for payment by the fund to Putnam Retail Management Limited Partnership at an annual rate of up to 0.35% of the average net assets attributable to the fund's class IB shares. The Trustees have approved payment by the fund at an annual rate of 0.25% of the average net assets attributable to the fund's class IB shares. The expenses related to distribution fees during the reporting period are included in Distribution fees in the Statement of operations.

**Note 3 — Purchases and sales of securities**

During the reporting period, the cost of purchases and the proceeds from sales, excluding short-term investments, were as follows:

	Cost of purchases	Proceeds from sales
Investments in securities, including TBA commitments (Long-term)	\$97,013,105	\$107,180,383
U.S. government securities (Long-term)	—	—
<b>Total</b>	<b>\$97,013,105</b>	<b>\$107,180,383</b>

The fund may purchase or sell investments from or to other Putnam funds in the ordinary course of business, which can reduce the fund's transaction costs, at prices determined in accordance with SEC requirements and policies approved by the Trustees. During the reporting period, purchases or sales of long-term securities from or to other Putnam funds, if any, did not represent more than 5% of the fund's total cost of purchases and/or total proceeds from sales.

#### Note 4 — Capital shares

At the close of the reporting period, there were an unlimited number of shares of beneficial interest authorized. Subscriptions and redemptions are presented at the omnibus level. Transactions in capital shares were as follows:

	Class IA shares				Class IB shares			
	Year ended 12/31/23		Year ended 12/31/22		Year ended 12/31/23		Year ended 12/31/22	
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount
Shares sold	187,915	\$2,355,037	316,671	\$3,895,020	994,989	\$12,419,900	1,355,962	\$16,993,116
Shares issued in connection with reinvestment of distributions	76,872	919,393	444,573	5,832,794	155,727	1,854,708	1,015,077	13,256,907
	264,787	3,274,430	761,244	9,727,814	1,150,716	14,274,608	2,371,039	30,250,023
Shares repurchased	(671,588)	(8,350,535)	(775,735)	(9,704,224)	(1,614,374)	(20,038,478)	(1,899,742)	(23,404,331)
<b>Net increase (decrease)</b>	<b>(406,801)</b>	<b>\$(5,076,105)</b>	<b>(14,491)</b>	<b>\$23,590</b>	<b>(463,658)</b>	<b>\$(5,763,870)</b>	<b>471,297</b>	<b>\$6,845,692</b>

#### Note 5 — Affiliated transactions

Transactions during the reporting period with any company which is under common ownership or control were as follows:

Name of affiliate	Fair value as of 12/31/22	Purchase cost	Sale proceeds	Investment income	Shares outstanding and fair value as of 12/31/23
<b>Short-term investments</b>					
Putnam Cash Collateral Pool, LLC*	\$2,117,626	\$35,635,109	\$31,153,485	\$130,444	\$6,599,250
Putnam Short Term Investment Fund Class P**	5,127,083	36,184,211	29,844,160	266,494	11,467,134
<b>Total Short-term investments</b>	<b>\$7,244,709</b>	<b>\$71,819,320</b>	<b>\$60,997,645</b>	<b>\$396,938</b>	<b>\$18,066,384</b>

\* No management fees are charged to Putnam Cash Collateral Pool, LLC (Note 1). Investment income shown is included in securities lending income on the Statement of operations. There were no realized or unrealized gains or losses during the period.

\*\* Management fees charged to Putnam Short Term Investment Fund have been waived by Putnam Management. There were no realized or unrealized gains or losses during the period.

#### Note 6 — Market, credit and other risks

In the normal course of business, the fund trades financial instruments and enters into financial transactions where risk of potential loss exists due to changes in the market (market risk) or failure of the contracting party to the transaction to perform (credit risk). The fund may be exposed to additional credit risk that an institution or other entity with which the fund has unsettled or open transactions will default. Investments in foreign securities involve certain risks, including those related to economic instability, unfavorable political developments, and currency fluctuations.

The fund may invest a significant portion of its assets in securitized debt instruments, including mortgage-backed and asset-backed investments. The yields and values of these investments are sensitive to changes in interest rates, the rate of principal payments on the underlying assets and the market's perception of the issuers. The market for these investments may be volatile and limited, which may make them difficult to buy or sell.

**Note 7 — Summary of derivative activity**

The volume of activity for the reporting period for any derivative type that was held during the period is listed below and was based on an average of the holdings at the end of each fiscal quarter:

Purchased equity option contracts (contract amount)	\$13,000
Written equity option contracts (contract amount)	\$13,000
Futures contracts (number of contracts)	9
Forward currency contracts (contract amount)	\$8,800,000

The following is a summary of the fair value of derivative instruments as of the close of the reporting period:

**Fair value of derivative instruments as of the close of the reporting period**

Derivatives not accounted for as hedging instruments under ASC 815	Asset derivatives		Liability derivatives	
	Statement of assets and liabilities location	Fair value	Statement of assets and liabilities location	Fair value
Foreign exchange contracts	Receivables	\$11,445	Payables	\$146,712
Equity contracts	Investments, Receivables	41,082*	Payables, Net assets — Unrealized depreciation	673
<b>Total</b>		<b>\$52,527</b>		<b>\$147,385</b>

\*Includes cumulative appreciation/depreciation of futures contracts as reported in the fund's portfolio. Only current day's variation margin is reported within the Statement of assets and liabilities.

The following is a summary of realized and change in unrealized gains or losses of derivative instruments in the Statement of operations for the reporting period (Note 1):

**Amount of realized gain or (loss) on derivatives recognized in net gain or (loss) on investments**

Derivatives not accounted for as hedging instruments under ASC 815	Options	Futures	Forward currency contracts	Total
Foreign exchange contracts	\$—	\$—	\$(41,013)	\$(41,013)
Equity contracts	12,333	93,108	—	\$105,441
<b>Total</b>	<b>\$12,333</b>	<b>\$93,108</b>	<b>\$(41,013)</b>	<b>\$64,428</b>

**Change in unrealized appreciation or (depreciation) on derivatives recognized in net gain or (loss) on investments**

Derivatives not accounted for as hedging instruments under ASC 815	Options	Futures	Forward currency contracts	Total
Foreign exchange contracts	\$—	\$—	\$(94,884)	\$(94,884)
Equity contracts	(9,191)	75,826	—	\$66,635
<b>Total</b>	<b>\$(9,191)</b>	<b>\$75,826</b>	<b>\$(94,884)</b>	<b>\$(28,249)</b>

**Note 8 — Offsetting of financial and derivative assets and liabilities**

The following table summarizes any derivatives, repurchase agreements and reverse repurchase agreements, at the end of the reporting period, that are subject to an enforceable master netting agreement or similar agreement. For securities lending transactions or borrowing transactions associated with securities sold short, if any, see Note 1. For financial reporting purposes, the fund does not offset financial assets and financial liabilities that are subject to the master netting agreements in the Statement of assets and liabilities.

	Bank of America N.A.	Barclays Bank PLC	BofA Securities, Inc.	Citibank, N.A.	Citigroup Global Markets, Inc.	Goldman Sachs International
<b>Assets:</b>						
Futures contracts <sup>§</sup>	\$—	\$—	\$—	\$—	\$—	\$—
Forward currency contracts <sup>#</sup>	—	—	—	—	—	—
Purchased options <sup>**#</sup>	—	—	—	—	—	—
<b>Total Assets</b>	<b>\$—</b>	<b>\$—</b>	<b>\$—</b>	<b>\$—</b>	<b>\$—</b>	<b>\$—</b>
<b>Liabilities:</b>						
Futures contracts <sup>§</sup>	—	—	6,775	—	—	—
Forward currency contracts <sup>#</sup>	6,157	30,823	—	26,185	—	11,060
Written options <sup>#</sup>	—	—	—	—	—	—
<b>Total Liabilities</b>	<b>\$6,157</b>	<b>\$30,823</b>	<b>\$6,775</b>	<b>\$26,185</b>	<b>\$—</b>	<b>\$11,060</b>
<b>Total Financial and Derivative Net Assets</b>	<b>\$(6,157)</b>	<b>\$(30,823)</b>	<b>\$(6,775)</b>	<b>\$(26,185)</b>	<b>\$—</b>	<b>\$(11,060)</b>
Total collateral received (pledged) <sup>##†</sup>	\$—	\$—	\$—	\$—	\$—	\$—
Net amount	\$(6,157)	\$(30,823)	\$(6,775)	\$(26,185)	\$—	\$(11,060)
<i>Controlled collateral received (including TBA commitments)<sup>**</sup></i>	\$—	\$—	\$—	\$—	\$23,000	\$—
<i>Uncontrolled collateral received</i>	\$—	\$—	\$—	\$—	\$—	\$—
<i>Collateral (pledged) (including TBA commitments)<sup>**</sup></i>	\$—	\$—	\$—	\$—	\$—	\$—

<sup>\*\*</sup> Included with Investments in securities on the Statement of assets and liabilities.

<sup>†</sup> Additional collateral may be required from certain brokers based on individual agreements.

<sup>#</sup> Covered by master netting agreement (Note 1).

<sup>##</sup> Any over-collateralization of total financial and derivative net assets is not shown. Collateral may include amounts related to unsettled agreements.

<sup>§</sup> Includes current day's variation margin only as reported on the Statement of assets and liabilities, which is not collateralized. Cumulative appreciation/(depreciation) for futures contracts is represented in the tables listed after the fund's portfolio. Collateral pledged for initial margin on futures contracts, which is not included in the table above, amounted to \$142,280.

HSBC Bank USA, National Association	JPMorgan Chase Bank N.A.	Morgan Stanley & Co. International PLC	State Street Bank and Trust Co.	Toronto-Dominion Bank	UBS AG	WestPac Banking Corp.	Total
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
—	—	9,701	—	1,744	—	—	11,445
—	—	—	—	—	2,033	—	2,033
<b>\$—</b>	<b>\$—</b>	<b>\$9,701</b>	<b>\$—</b>	<b>\$1,744</b>	<b>\$2,033</b>	<b>\$—</b>	<b>\$13,478</b>
—	—	—	—	—	—	—	6,775
8,332	25,338	3,353	410	—	17,778	17,276	146,712
—	—	—	—	—	673	—	673
<b>\$8,332</b>	<b>\$25,338</b>	<b>\$3,353</b>	<b>\$410</b>	<b>\$—</b>	<b>\$18,451</b>	<b>\$17,276</b>	<b>\$154,160</b>
<b>\$(8,332)</b>	<b>\$(25,338)</b>	<b>\$6,348</b>	<b>\$(410)</b>	<b>\$1,744</b>	<b>\$(16,418)</b>	<b>\$(17,276)</b>	<b>\$(140,682)</b>
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
\$(8,332)	\$(25,338)	\$6,348	\$(410)	\$1,744	\$(16,418)	\$(17,276)	\$—
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$23,000
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—

## **Federal tax information (Unaudited)**

The fund designated 56.69% of ordinary income distributions as qualifying for the dividends received deduction for corporations.

## Shareholder meeting results (Unaudited)

### October 20, 2023 special meeting

At the meeting, a new Management Contract for your fund with Putnam Investment Management, LLC was approved, as follows:

Votes for	Votes against	Abstentions/Votes withheld
15,003,669	503,170	1,286,723

At the meeting, a new Sub-Management Contract for your fund between Putnam Investment Management, LLC and Putnam Investments Limited was approved, as follows:

Votes for	Votes against	Abstentions/Votes withheld
14,811,431	554,927	1,427,203

All tabulations are rounded to the nearest whole number.

## About the Trustees

Name	Year of birth	Position held	Principal occupations during past five years	Other directorships	
<b>Independent Trustees</b>					
<b>Liaquat Ahamed</b>	Born 1952	Trustee since 2012	Author; won Pulitzer Prize for <i>Lords of Finance: The Bankers Who Broke the World</i> .	Chair of the Sun Valley Writers Conference, a literary not-for-profit organization, and a Trustee of the Journal of Philosophy.	
<b>Barbara M. Baumann</b>	Born 1955	Trustee since 2010 Vice Chair since 2022	President of Cross Creek Energy Corporation, a strategic consultant to domestic energy firms and direct investor in energy projects.	Director of Devon Energy Corporation, a publicly traded independent natural gas and oil exploration and production company; Director of National Fuel Gas Company, a publicly traded energy company that engages in the production, gathering, transportation, distribution, and marketing of natural gas; Senior Advisor to the energy private equity firm First Reserve; member of the Finance Committee of the Children's Hospital of Colorado; member of the Investment Committee of the Board of The Denver Foundation; and previously a Director of publicly traded companies Buckeye Partners LP, UNS Energy Corporation, CVR Energy Company, and SM Energy Corporation.	
<b>Katinka Domotorffy</b>	Born 1975	Trustee since 2012	Voting member of the Investment Committees of the Anne Ray Foundation and Margaret A. Cargill Foundation, part of the Margaret A. Cargill Philanthropies.	Director of the Great Lakes Science Center and of College Now Greater Cleveland.	
<b>Catharine Bond Hill</b>	Born 1954	Trustee since 2017	Managing Director of Ithaka S+R, a not-for-profit service that helps the academic community navigate economic and technological change. From 2006 to 2016, Dr. Hill served as the 10th president of Vassar College.	Director of Yale-NUS College and Trustee of Yale University.	
<b>Kenneth R. Leibler</b>	Born 1949	Trustee since 2006 Vice Chair from 2016 to 2018, Chair since 2018	Vice Chair Emeritus of the Board of Trustees of Beth Israel Deaconess Hospital in Boston. Member of the Investment Committee of the Boston Arts Academy Foundation.	Director of Eversource Corporation, which operates New England's largest energy delivery system; previously the Chairman of the Boston Options Exchange, an electronic marketplace for the trading of listed derivatives securities; previously the Chairman and Chief Executive Officer of the Boston Stock Exchange; and previously the President and Chief Operating Officer of the American Stock Exchange.	
<b>Jennifer Williams Murphy*</b>	Born 1964	Trustee since 2022	Chief Executive Officer and Founder of Runa Digital Assets, LLC, an institutional investment advisory firm specializing in active management of digital assets. Until 2021, Chief Operating Officer of Western Asset Management, LLC, a global investment adviser, and Chief Executive Officer and President of Western Asset Mortgage Capital Corporation, a mortgage finance real estate investment trust.	Previously, a Director of Western Asset Mortgage Capital Corporation.	
<b>Marie Pillai</b>	Born 1954	Trustee since 2022	Senior Advisor, Hunter Street Partners, LP, an asset-oriented private investment firm; Specialty Leader and Member of the Curriculum Committee of the Center for Board Certified Fiduciaries, a public benefit corporation providing coursework for developing fiduciaries. Until 2019, Vice President, Chief Investment Officer, and Treasurer of General Mills, Inc., a global food company.	Member of the Investment Committee of the Bush Foundation, a nonprofit organization supporting community problem-solving in Minnesota, North Dakota, and South Dakota; Member of the Finance Council and Corporate Board of the Archdiocese of Saint Paul and Minneapolis; Director of Choice Bank, a private, community bank based in North Dakota; and previously a Board Member of Catholic Charities of St. Paul and Minneapolis; former Director of the Catholic Community Foundation of Minnesota; and former Investment Advisory Board Member of the University of Minnesota.	
<b>George Putnam III</b>	Born 1951	Trustee since 1984	Chairman of New Generation Research, Inc., a publisher of financial advisory and other research services, and President of New Generation Advisors, LLC, a registered investment adviser to private funds.	Director of The Boston Family Office, LLC, a registered investment adviser; a Director of the Gloucester Marine Genomics Institute; a Trustee of the Lowell Observatory Foundation; and previously a Trustee of the Marine Biological Laboratory.	

Name Year of birth Position held	Principal occupations during past five years	Other directorships	
<b>Manoj P. Singh</b> Born 1952 Trustee since 2017	Until 2015, Chief Operating Officer and Global Managing Director at Deloitte Touche Tohmatsu, Ltd., a global professional services organization, serving on the Deloitte U.S. Board of Directors and the boards of Deloitte member firms in China, Mexico, and Southeast Asia.	Director of ReNew Energy Global PLC, a publicly traded renewable energy company; Director of Abt Associates, a global research firm working in the fields of health, social and environmental policy, and international development; Trustee of Carnegie Mellon University; Director of Pratham USA, an organization dedicated to children's education in India; member of the advisory board of Altimetrik, a business transformation and technology solutions firm; and Director of DXC Technology, a global IT services and consulting company.	
<b>Mona K. Sutphen</b> Born 1967 Trustee since 2020	Partner, Investment Strategies, at The Vistria Group, a private investment firm focused on middle-market companies in the health care, education, and financial services industries. From 2014 to 2018, Partner at Macro Advisory Partners, a global consulting firm.	Director of Spotify Technology S.A., a publicly traded audio content streaming service; Director of Unitek Learning, a private nursing and medical services education provider in the United States; Board Member, International Rescue Committee; Co-Chair of the Board of Human Rights First; Trustee of Mount Holyoke College; member of the Advisory Board for the Center on Global Energy Policy at Columbia University's School of International and Public Affairs; previously Director of Pattern Energy and Pioneer Natural Resources, publicly traded energy companies; and previously Managing Director of UBS AG.	

### Interested Trustees

<b>Robert L. Reynolds†</b> Born 1952 Trustee since 2008	Chair of Great-West Lifeco U.S. LLC. Prior to 2019, also President and Chief Executive Officer of Great-West Financial, a financial services company that provides retirement savings plans, life insurance, and annuity and executive benefits products, and of Great-West Lifeco U.S. LLC, a holding company that owns Putnam Investments and Great-West Financial, and a member of Great-West Financial's Board of Directors. Until 2023, President and Chief Executive Officer of Putnam Investments, President and Chief Executive Officer of Putnam Management, and member of Putnam Investments' Board of Directors.	Director of the Concord Museum; Director of Dana-Farber Cancer Institute; Director of the U.S. Ski & Snowboard Foundation; Chair of the Boston Advisory Board of the American Ireland Fund; Council Co-Chair of the American Enterprise Institute; Member of U.S. Chamber of Commerce, Center for Capital Markets Competitiveness; Chair of Massachusetts High Technology Council; Member of the Chief Executives Club of Boston; Member of the Massachusetts General Hospital President's Council; Chairman of the Board of Directors of the Ron Burton Training Village; Director and former Chair of the Massachusetts Competitive Partnership; former Chair of the West Virginia University Foundation; and former Executive Committee Member of the Greater Boston Chamber of Commerce.	
<b>Jane E. Trust‡</b> Born 1962 Trustee since 2024	Since 2020, Senior Vice President, Fund Board Management, of Franklin Templeton. Since 2015, Officer and/or Trustee/Director of 127 funds associated with Legg Mason Partners Fund Advisor, LLC ("LMPFA") or its affiliates, and President and Chief Executive Officer of LMPFA. From 2018 to 2020, Senior Managing Director of Legg Mason & Co., LLC (Legg Mason & Co.). From 2016 to 2018, Managing Director of Legg Mason & Co. In 2015, Senior Vice President of LMPFA.	None.	

\*Ms. Murphy is the founder, controlling member, and Chief Executive Officer of Runa Digital Assets, LLC ("RDA"), the investment manager of Runa Digital Partners, LP ("RDP"), a private investment fund. Ms. Murphy also holds a controlling interest in RDP's general partner and is a limited partner in RDP. A subsidiary of Franklin Templeton and certain individuals employed by Franklin Templeton or its affiliates have made passive investments as limited partners in RDP (one of whom serves on the advisory board for RDA, which has no governance or oversight authority over RDA), representing in the aggregate approximately 33% of RDP as of October 31, 2023. In addition, if certain conditions are met, Franklin Templeton will be entitled to receive a portion of any incentive compensation allocable to RDP's general partner. For so long as Franklin Templeton maintains its investment in RDP, Ms. Murphy also has agreed upon request to advise and consult with Franklin Templeton and its affiliates on the market for digital assets. Ms. Murphy provides similar service to other limited partners in RDP that request her advice. Ms. Murphy also is entitled to receive deferred cash compensation in connection with her prior employment by an affiliate of Franklin Templeton, which employment ended at the end of 2021. With regard to Ms. Murphy, the relationships described above may give rise to a potential conflict of interest with respect to the Funds.

†Mr. Reynolds is an "interested person" (as defined in the Investment Company Act of 1940) of the fund and Putnam Management. He is President of your fund and each of the other Putnam funds and holds direct beneficial interest in shares of Franklin Templeton, of which Putnam Management is an indirect wholly-owned subsidiary.

‡Ms. Trust is an "interested person" (as defined in the Investment Company Act of 1940) of the fund and Putnam Management by virtue of her positions with certain affiliates of Putnam Management.

The address of each Trustee is 100 Federal Street, Boston, MA 02110.

As of December 31, 2023, there were 105 funds in the Putnam family of funds, including 89 mutual funds, 4 closed-end funds, and 12 exchange-traded funds. Each Trustee serves as Trustee of the 105 funds in the Putnam family of funds. Ms. Trust also serves as Trustee of 127 other funds that are advised by one or more affiliates of Putnam Management.

Each Trustee serves for an indefinite term, until his or her resignation, retirement at age 75, removal, or death.

## Officers

In addition to Robert L. Reynolds, the other officers of the fund are shown below:

**Kevin R. Blatchford** *(Born 1967)*

Vice President and Assistant Treasurer

*Since 2023*

Director, Financial Reporting, Putnam Holdings

**James F. Clark** *(Born 1974)*

Vice President and Chief Compliance Officer

*Since 2016*

Chief Compliance Officer, Putnam Management and Putnam Holdings

**Michael J. Higgins** *(Born 1976)*

Vice President, Treasurer, and Clerk

*Since 2010*

**Jonathan S. Horwitz** *(Born 1955)*

Executive Vice President, Principal Executive Officer, and Compliance Liaison

*Since 2004*

**Kelley Hunt** *(Born 1984)*

AML Compliance Officer

*Since 2023*

Manager, U.S. Financial Crime Compliance, Franklin Templeton

**Martin Lemaire** *(Born 1984)*

Vice President and Derivatives Risk Manager

*Since 2022*

Risk Manager and Risk Analyst, Putnam Management

**Alan G. McCormack** *(Born 1964)*

Vice President and Derivatives Risk Manager

*Since 2022*

Head of Quantitative Equities and Risk, Putnam Management

**Denere P. Poulack** *(Born 1968)*

Assistant Vice President, Assistant Clerk, and Assistant Treasurer

*Since 2004*

**Janet C. Smith** *(Born 1965)*

Vice President, Principal Financial Officer, Principal Accounting Officer, and Assistant Treasurer

*Since 2007*

Head of Fund Administration Services, Putnam Holdings and Putnam Management

**Stephen J. Tate** *(Born 1974)*

Vice President and Chief Legal Officer

*Since 2021*

General Counsel, Putnam Holdings, Putnam Management, and Putnam Retail Management

The principal occupations of the officers for the past five years have been with the employers as shown above, although in some cases they have held different positions with such employers. The address of each officer, other than Ms. Hunt, is 100 Federal Street, Boston, MA 02110. Ms. Hunt's address is 100 Fountain Parkway, St. Petersburg, FL 33716.

## Other important information

### Proxy voting

The Putnam funds' proxy voting guidelines and procedures, as well as information regarding how your fund voted proxies relating to portfolio securities during the 12-month period ended June 30, 2023, are available in the Individual Investors section of [putnam.com](http://putnam.com) and on the Securities and Exchange Commission's (SEC) website at [www.sec.gov](http://www.sec.gov). If you have questions about finding forms on the SEC's website, you may call the SEC at 1-800-SEC-0330. You may also obtain the Putnam funds' proxy voting guidelines and procedures at no charge by calling 1-800-225-1581.

### Fund portfolio holdings

The fund will file a complete schedule of its portfolio holdings with the SEC for the first and third quarters of each fiscal year on Form N-PORT within 60 days of the end of such fiscal quarter. Shareholders may obtain the fund's Form N-PORT from the SEC's website at [www.sec.gov](http://www.sec.gov).

## Fund information

### Investment Manager

Putnam Investment Management, LLC  
100 Federal Street  
Boston, MA 02110

### Investment Sub-Advisor

Putnam Investments Limited  
16 St James's Street  
London, England SW1A 1ER

### Marketing Services

Putnam Retail Management  
Limited Partnership  
100 Federal Street  
Boston, MA 02110

### Investor Servicing Agent

Putnam Investments  
Mailing address:  
P.O. Box 219697  
Kansas City, MO 64121-9697  
1-800-225-1581

### Custodian

State Street Bank and Trust Company

### Legal Counsel

Ropes & Gray LLP

### Independent Registered Public Accounting Firm

PricewaterhouseCoopers LLP

### Trustees

Kenneth R. Leibler, *Chair*  
Barbara M. Baumann, *Vice Chair*  
Liaquat Ahamed  
Katinka Domotorffy  
Catharine Bond Hill  
Jennifer Williams Murphy  
Marie Pillai  
George Putnam III  
Robert L. Reynolds  
Manoj P. Singh  
Mona K. Sutphen  
Jane E. Trust

The fund's Statement of Additional Information contains additional information about the fund's Trustees and is available without charge upon request by calling 1-800-225-1581.

